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ARMY MEDICAL DEPARTMENT

REPORT

FOR THE YEAR 1903.

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TO THE SECRETARY OF THE ARMY COUNCIL.

SIR,

I HAVE the honour to submit the accompanying Report on the Health and Sanitary Condition of the Army for the year 1903.

I have the honour to be,
SIR,
Your most obedient Servant,
A. KEOGH,
Director-General.

MEDICAL DIVISION, WAR OFFICE.

CONTENTS.

PAGE

er from the Director-General to the Secretary of the Army Council iii

REPORT.

I. Summary of the Health of European Troops at all Stations ... 1

I On the Health of the Troops serving in the UNITED KINGDOM—

Sickness and Mortality 8
Invaliding 25
On the influence of Age and Service on Sickness, Mortality and Invaliding 26
Remarks on the Prevalence of Sickness in Military Districts 27
Admissions, Deaths, and Invaliding, &c., in the different Arms of the Service 30
Health Statistics of Corps 30
Officers, Women and Children 33
Vaccination 39
On the Recruiting of the Army 41
Number of Recruits Inspected and Rejected 41
Native Countries of Recruits inspected 41
Previous Occupations of Recruits 42
Causes of Rejection of Recruits 43
Ages of Recruits 44
Tables showing the Heights, Weights, and Chest Measurements of Recruits 45
Extent of Education of Recruits 48
Sanitary Conditions.
North-Eastern District 49
North-Western District 49
Eastern District 51
Western District 53
Southern District 54
Netley 55
Salisbury Plain District 55
South-Eastern District 56
Thames District 57
Home District 57
Woolwich District 58
Aldershot 58
Channel Islands.... 59
Scottish District 59
Ireland :
Belfast District 61
Dublin District 61
Cork District.... 62

PAGE

III. On the Health of the Troops serving in GIBRALTAR—
Sickness and Mortality 64
Sanitary Conditions 70

IV. On the Health of the Troops serving in the MALTA COMMAND—
Sickness and Mortality:
I. British Troops 71
II. Royal Malta Artillery 81
Sanitary Conditions:
I. Malta 82
II. Crete 84

V. On the Health of the Troops serving in the DOMINION OF CANADA—
Sickness and Mortality 85
Sanitary Conditions 90

VI. On the Health of the Troops serving in BERMUDA—
Sickness and Mortality:
I. European Troops 91
II. Non-European Troops 96
Sanitary Conditions 98

VII. On the Health of the Troops serving in BARBADOS—
Sickness and Mortality:
I. European Troops 99
II. Non-European Troops 104
Sanitary Conditions 107

VIII. On the Health of the Troops serving in JAMAICA—
Sickness and Mortality:
I. European Troops 110
II. Non-European Troops 114
Sanitary Conditions 117

IX. On the Health of the Troops serving in WESTERN AFRICA—
Sickness and Mortality:
I. European Troops 119
II. Non-European Troops 121
Sanitary Conditions 124

X. On the Health of the Troops serving in ST. HELENA—
Sickness and Mortality 125
Sanitary Conditions 129

XI. On the Health of the Troops serving in the SOUTH AFRICAN COMMAND—
Sickness and Mortality 130
Sanitary Conditions 164

XII. On the Health of the Troops serving in MAURITIUS—
Sickness and Mortality:
I. European Troops 175
II. Non-European Troops 179
Sanitary Conditions 180

XIII. On the Health of the Troops serving in CEYLON—
Sickness and Mortality:
I. European Troops 181
II. Asiatic Troops 186
Sanitary Conditions 186

PAGE

XIV. On the Health of the Troops serving in SOUTH CHINA—
Sickness and Mortality :
I. European Troops 188
II. Asiatic Troops 193
Sanitary Conditions 193

XV. On the health of the troops serving in NORTH CHINA—
Sickness and Mortality 195
Sanitary Conditions 197

XVI. On the Health of the Troops serving in the STRAITS SETTLEMENTS—
Sickness and Mortality :
I. European Troops 199
II. Asiatic Troops 204
Sanitary Conditions 204

XVII. On the Health of the European Troops serving in INDIA—
Sickness and Mortality 205
Sanitary Conditions 286

XVIII. On the Health of the Troops serving in EGYPT AND CYPRUS—
Sickness and Mortality :
I. British Troops 292
II. Royal Malta Artillery 302
Sanitary Conditions 303

XIX On the Health of the Troops on BOARD SHIP—
I. Troops proceeding on Service Abroad 304
II. ,, returning from ditto 305
III. ,, proceeding from one Station abroad to another 307
IV. Invalids returning to England 308
V. Sanitary condition of ships 308

ABSTRACTS—HOME.

No. I.—United Kingdom, Summary of the Health of the Troops serving in 310
A.—England, ditto 312
B.—Scotland, ditto 314
C.—Ireland, ditto 316
D.—Summary of the Health of the Officers, Women, and Children in the United Kingdom 318
E. and F.—Summaries of the health of troops on Manœuvres 320

ABSTRACTS—COLONIAL STATIONS.

No. II.—Gibraltar, Summary of the Health of the Troops serving in 322
III.—Malta, ditto 324
IIIA.—Royal Malta Artillery, ditto 326
IV.—Dominion of Canada, ditto.... 328
V.—Bermuda, ditto 330
VI.—Ditto, Non-European Troops, ditto 332
VII.—Barbados, European Troops, ditto 334
VIII.—Ditto, Non-European Troops, ditto 336
IX.—Jamaica, European Troops, ditto 338
X.—Ditto, Non-European Troops, ditto 340
XI.—Western Africa, European Troops, ditto.... 342
XII.—Ditto, Non-European Troops, ditto 344
XIII.—St. Helena, European Troops, ditto 346

PAGE

ABSTRACTS—COLONIAL STATIONS—*contd.*

No. XIV.—South African Command, Summary of the Health of the Troops serving in 348
XIVA.—Cape Colony, ditto 350
XIVB.—Natal, ditto 351
XIVC.—Transvaal and Orange River Colony, ditto 352
XV.—Admissions and Deaths by Classes of Diseases in each of the Military Districts in South Africa 354
XVI.—Enteric Fever in South Africa 356
XVII.—Dysentery, Diarrhœa, and Hepatitis in each District in South Africa 357
XVIII.—Ditto, Seasonal prevalence 358
XIX.—Mauritius, Summary of the Health of the Troops serving in 360
XX.—Ceylon, ditto 362
XXI.—South China, ditto 364
XXIA.—North China, ditto 366
XXII.—Straits Settlements, ditto 368

ABSTRACTS—INDIA.

No. XXIII.—Summary of the Health of the Troops serving in 370
XXIV.—Admissions and Deaths by Classes of Diseases in each of the Military Districts 372
XXV.—Admissions and Deaths at the chief Stations 380
XXVI.—Enteric Fever 384
XXVII.—Cholera 388
XXVIII.—Dysentery, Diarrhœa, and Hepatitis in each District 389
XXIX.—Ditto, Seasonal prevalence 390

ABSTRACTS—MISCELLANEOUS.

No. XXX.—Egypt and Cyprus.—Summary of the Health of the Troops serving in 392
XXXI.—Troops on Board Ship, Summary of the Health of the 394
XXXII.—Influence of Age on Mortality in Commands Abroad 396
XXXIII.—Health Statistics of Corps in the United Kingdom 398
XXXIV.—Health Statistics of Corps in Commands Abroad, exclusive of India 418
XXXV.—Health Statistics of Corps in India 438
XXXVI.—, XXXVII.—, XXXVIII.— Health Statistics among the European Troops stationed at Home and Abroad 449, 450, 451
XXXIX.—Summary of the Health of the Troops serving at Home and Abroad 452

Chart showing the Sickness and Mortality from Enteric Fever in the various Commands occupied by British Troops during 1903, and the decennial period 1893–1902 454

Chart showing the Sickness, Mortality, and Invaliding from Tubercular Diseases in the various Commands occupied by British Troops during 1903, and the decennial period 1893–1902.... 456

Chart showing the incidence of sickness from Malarial Fevers at certain stations during 1903, and the decennial period 1893–1902 458

Chart showing the incidence of Venereal Disease in the various Commands occupied by British Troops during 1903, and the decennial period 1893–1902 460

Meteorological Observations 462

The Parkes Memorial Prize 483

The Alexander Memorial Fund 484

ARMY MEDICAL DEPARTMENT REPORT FOR 1903.

ARMY MEDICAL DEPARTMENT REPORT FOR 1903.

I.—HEALTH OF THE TROOPS AT HOME AND ABROAD.

Troops at Home and Abroad.

The average strength of European troops serving at home and abroad in 1903, as compiled from the returns received by the Army Medical Department, was 242,182 warrant officers, non-commissioned officers, and men. The total number of admissions to hospital was 183,598, the total deaths 1,881, and the total number of men finally discharged from the service on account of disease and injuries was 4,922. The admissions represent a ratio of 758·1 per 1,000 of strength as above; the deaths one of 7·13 per 1,000, on a strength of 263,888, which includes detached men not shown in the returns received. In 1902 the admission ratio was 751·9 and the death rate 7·52 per 1,000; while for the decennial period from 1893 to 1902, the corresponding ratios were 927·4 and 8·57 respectively. The principal causes of admission during the year were venereal affections, diseases of the digestive system, malarial fevers, injuries, diseases of the skin and diseases of the respiratory system. The chief causes of death were enteric fever (481), injuries (290), diseases of the digestive system (205), diseases of the respiratory system, excluding tubercle of the lung (203), and diseases of the circulatory system (142). The invaliding records show that diseases of the circulatory system (942), diseases of the nervous system (668), diseases of the digestive system (507), tubercular diseases (338), and diseases of the organs of locomotion (311), head the list in the case of men finally discharged as unfit for further service. Malarial fevers and debility caused a great deal of invaliding from abroad, but most of the men recovered sufficiently to retake their places in the ranks.

The admission, mortality, and constantly sick rates amongst the troops serving in the United Kingdom were 586·9, 3·41, and 35·23 per 1,000 respectively, as compared with 711·2, 4·18, and 41·65 in 1902, and with 682·2, 4·47, and 39·59 the admission, death and constantly sick rates for the decennial period 1893–1902. The admission rate compares favourably with that of other armies, especially as the returns include all classes of sickness, both mild and severe; while the death rate cannot be regarded as excessive, when it is remembered that it is not a rate resulting alone from sickness originating in the United Kingdom, but that it is also contributed to by disease contracted during service abroad. For example, there were 855 admissions for malarial fever, in all of which instances the disease must have been contracted abroad; 69 cases were admitted for bilharzia hæmatobia, all of them men who had served in South Africa; further, service under tropical conditions is without doubt responsible for many of the admissions for diseases of the digestive system; and to service abroad must also be debited most of the 94 admissions for dysentery, as well as the 13 deaths from abscess of the liver. Influenza caused 1,571 admissions as compared with 2,221 in 1902 and 2,328 in 1901. Only 2 cases of smallpox occurred as compared with 11 in the previous year, and the admission rate for other eruptive fevers was lower than in the preceding year, and also lower than the decennial average rate. There were 92 admissions for and 28 deaths from enteric fever, which shows a decrease in both the admission and mortality rates as compared with the previous year, and is also lower than the average rates for the decennial period. Aldershot, with 27 cases, had

the highest number of admissions, followed by Buttevant with 8, Dublin with 7, and Portsmouth with 6 cases. Regarding the cases at Aldershot, 16 were reported as having probably contracted the disease in South Africa or on the voyage home, 2 had been on furlough shortly before admission, and 1 had recently arrived from another station. There was a slight increase in the admission rate for venereal disease during the year under review, but it is still below the average rate for the preceding ten years.

Gibraltar had an admission ratio of 396·9 and a death rate of 4·95 per 1,000, as compared with 314·9 and 4·79 in 1902, and with 660·3 and 4·11 the average rates for the preceding ten years. There was an increase in the admission rate for venereal diseases, which was, however, lower than the average for the decennial period. Mediterranean fever caused the invaliding of 11 men, and there were also 4 cases with 1 death amongst the officers.

In the Malta Command (including Crete), there was a decrease in the admission rate and an inconsiderable increase in the mortality and constantly sick rates.

The admission rate amongst the troops in Crete was 1243·9 per 1,000 against 2908·7 in 1902; this large decrease was due to a diminution in the prevalence of malarial fever resulting from the anti-mosquito measures adopted to prevent the spread of the disease.

For Malta and Gozo, the admission and constantly sick rates were respectively 592·2 and 44·69 per 1,000, as compared with 587·5 and 39·33 in the previous year. Enteric fever was less prevalent than in 1902, and the admission ratio was also lower than the decennial average. The prevalence of Mediterranean fever was much in excess of previous years. It caused 404 admissions with 9 deaths, amongst the men, and 133 of the cases had to be invalided; 54 cases occurred amongst the officers, 21 of whom were invalided; while there were 70 cases amongst the women with 1 death, and 33 cases amongst the children also with 1 death. The disease was very prevalent amongst the 1st Battalion, King's Royal Rifle Corps, and a number of cases occurred amongst the troops under canvas at Ghain Tuffieha. Venereal disease showed an increased admission rate as compared with 1902, but it was still below the average rate for the preceding ten years.

In Canada, the health of the troops was very satisfactory. The admission, death and constantly sick rates were respectively 323·8, 3·02 and 19·91 per 1,000 as compared with 558·0, 4·02 and 24·87 in 1902. There was a large decrease in the prevalence of venereal disease.

In Bermuda, the admission, mortality and constantly sick rates were all lower than in 1902. Enteric fever was again largely prevalent, but the admission ratio was considerably lower than in the previous year. There was an increase in the venereal admission rate, but it is still below the decennial average.

In the Barbados Command (in which is included the health statistics of the troops at St. Lucia and at Trinidad), there was a large decrease in the prevalence of malarial fevers as compared with the previous year, which may be attributed to various causes, amongst which were the more healthy character of the season of 1903, the departure of troops who had been several years in the station and had suffered from malaria, and their relief by healthy men from a non malarious station, and also to the large amount of draining and clearing accomplished at St. Lucia during the year, and to the great diminution in the number of anopheles brought about by these and other anti malarial measures. Venereal diseases also showed a large decrease as compared with 1902.

At Jamaica the admission rate was higher and the mortality and constantly sick rates lower than 1902. Five cases of yellow fever occurred at Port Royal. There was an increase in the admission rate for malarial fevers, which was associated with the occurrence of a hurricane followed by heavy rainfall.

In West Africa malarial fevers, though not so prevalent as in previous years, furnished the majority of the admissions.

Troops at Home and Abroad.

In the South African Command, with an average strength of 27,680, the admission, death and constantly sick rates were 797·8, 11·06 and 60·03 per 1,000 respectively. In order of frequency, the most important causes of admission were diseases of the digestive system, injuries, venereal diseases, diseases of the skin, enteric fever, influenza, diseases of the respiratory system, dysentery and rheumatism. The chief causes of death were enteric fever (138), injuries (38), pneumonia (36), dysentery (23), and diseases of the digestive system (18, including 8 from abscess of the liver). The total number of men invalided was 1,074 of whom 3 were discharged in South Africa, and of the 1,071 sent home 756 were ultimately discharged as medically unfit for further service. The principal causes of invaliding were enteric fever, diseases of the digestive system, diseases of the circulatory system, nervous and mental diseases, ear diseases, bilharzia hæmatobia and injuries. There were 145 cases of scarlet fever, the disease having been introduced to the garrisons of South Africa by drafts from England. One fatal case of plague occurred. Enteric fever caused 1,155 admissions, 138 deaths and the invaliding of 211 men. The stations which furnished the largest numbers of cases were Pretoria, Stellenbosch, Potchefstroom, Middelburg (Cape Colony), Kroonstad, Bloemfontein, Harrismith, Standerton, Maritzburg, Mooi River, Middelburg (Transvaal) and Machadodorp. The disease is endemic in South Africa and it shows a regular periodic prevalence which is associated with the hot and wet season. Enteric prevalence usually begins in October and declines about May; and invariably the disease is in almost complete abeyance during the dry cold weather of June, July, August and part of September. As in India, so the teaching of South African experience is that the key to the prevention of this disease is the *prevention of soil pollution*. Polluting the soil of camps or barracks, or of their surroundings, should be regarded as a very grave offence; and perfection should be aimed at in connection with latrine arrangements and in regard to the methods used for the removal and disposal of excreta and refuse. In proportion as the ideal is approached in these matters, in direct proportion will the chances of enteric fever making its appearance be lessened. There are many difficulties in the way of a perfect system of conservancy under the conditions of camp life, but they are far from being unsurmountable, and the efforts of many applied to the same end should make the task light. Some of the more important points connected with enteric prevalence in South Africa are discussed at length in the body of the report. Diseases of the teeth and sore throat added largely to the admission rate. The admissions for diseases of the respiratory system included 507 for bronchitis, 225 for pneumonia, 103 for pleurisy and 81 for laryngitis. There was a considerable prevalence of venereal disease, and the stations which had the highest admission rates were Pietermaritzburg, Kimberley, Wynberg, Ladybrand, Simonstown, Burghersdorp and Mafeking.

In St. Helena (formerly incorporated in the statistics of the South African Command), the admission rate was higher and the mortality and constantly sick rates rates were lower than in 1902.

In Mauritius, the admission, death and constantly sick rates were lower than in 1902. Plague was very prevalent in the colony during the later months of the year, but as a result of the strict precautionary measures taken, only 1 case, which recovered, occurred amongst the European troops; there were 5 cases, all fatal amongst the Non-European troops. The admission ratio for malarial fevers showed a marked decrease as compared with the previous year; the disease was chiefly prevalent from January to July. Venereal diseases showed an increase.

In Ceylon, the health of the troops was good. Malarial fevers gave a slightly increased admission rate and there was also an increase in the ratio for venereal diseases as compared with the preceding year. There was only one admission for enteric fever.

In South China (Hong Kong), the admission, mortality and constantly sick rates were lower than in 1902. Malarial fevers showed a marked decrease as compared with the previous year, and it was considered that the decrease

was chiefly owing to the efforts made to get rid of mosquitoes and their larvæ by the removal or treatment of all likely breeding places. Mosquito nets have been issued to the troops and their families, and quinine was also used as a prophylactic. During the year there were 1,422 cases of plague among the civil population, mostly Chinese, but only two cases, both officers whose quarters adjoined the main road, occurred amongst the garrison.

In the North China Command, the stations occupied were Pekin and Tientsin, with average strengths of 256 and 216, and the admission, death and constantly sick rates were 781·8, 19·07 and 48·56 per 1,000 respectively. Enteric fever caused 9 admissions; 6 at Peking and 3 at Tientsin. Venereal diseases showed a high rate of prevalence.

In the Straits Settlements, malarial fevers were prevalent throughout the year, but the admission rate was added to considerably by the arrival from Hong-Kong of troops who were already affected by the disease. There was a slight increase in the admission rate for venereal diseases as compared with 1902. About 200 cases of cholera occurred among the native population during the dry season, but no case occurred amongst the troops.

In India, there was a decrease in the admission, mortality, constantly sick and invaliding rates. The health statistics for the year were exceptionally good, the admission rate being lower than that for any of the twenty-two preceding years. The chief causes of sickness, as usual, were malarial fevers and venereal diseases, which together caused 47·74 per cent. of the admissions for all diseases. Malarial fevers, dysentery and venereal diseases were less prevalent than in 1902.

As regards enteric fever there was an increase in the admission and constantly sick rates, the death rate, however, showing a decrease as compared with the previous year. The increase in the number of admissions for enteric fever, occurring as they do for the most part in young soldiers during their first year of service in India, must again be attributed to the arrival of large drafts and reliefs. Many of the men also who arrived from South Africa had been under the conditions of continuous field service for two or more years, and were probably rendered thereby more susceptible to any source of infection. Following the practice commenced in 1898, the chief points observed in 1903, in connection with the causation of enteric fever in India, are discussed at length. This part of the report contains much that is of value and importance to the Army Medical Officer, and indeed to sanitarians generally. The stations chiefly affected were Umballa (107 cases, 21 deaths), Meerut (100 cases, 23 deaths), Lucknow (94 cases, 12 deaths), Nasirabad (82 cases, 16 deaths), Mhow (75 cases, 12 deaths), Poona (74 cases, 19 deaths), Rawal Pindi (59 cases, 12 deaths), Peshawar (55 cases, 16 deaths), Quetta (42 cases, 6 deaths), Bangalore (41 cases, 9 deaths), Sialkot (39 cases, 12 deaths), Jhansi (37 cases, 11 deaths), Ranikhet (33 cases, 4 deaths), Secunderabad (32 cases, 8 deaths), Jubbulpore (31 cases, 3 deaths).

Cholera gave 79 admissions and 56 deaths, the stations particularly in point being Ranikhet (24 cases, 16 deaths), Mian Mir (13 cases, 11 deaths), Sialkot (10 cases, 6 deaths), Umballa (8 cases, 6 deaths), Calcutta (8 cases, 5 deaths), Peshawar (5 cases, 5 deaths).

During the year there were 12 admissions for plague, 2 of which terminated fatally.

Dysentery caused 1,133 admissions and 42 deaths as compared with 1,238 admissions and 44 deaths in 1902. The disease appears with unfailing regularity at certain stations, chief amongst which are Barrackpore, Secunderabad, and Lucknow. This year Rangoon heads the list with 64 cases and 8 deaths, many of the cases being severe and of the amœbic variety. Barrackpore, which for years has preserved an unenviable dysenteric notoriety, shows a considerably reduced admission ratio for the year under report. A curious feature in regard to this station is the marked increase of the disease amongst British troops since 1893, whilst the figures for the same period for native troops show an equally marked decrease. The period of seasonal prevalence is from June to October; liver abscess is a common sequel, and in 15 instances, examined microscopically, all but two proved to be cases of amœbic dysentery.

Troops at Home and Abroad.

In Egypt the admission and constantly sick rates were higher and the mortality rate lower than in 1902, and were all lower than the decennial average rates. The admission rate for enteric fever was lower, and that for venereal diseases higher, as comparedwith the previous year. The ratio of admission for the former disease during 1903 is 4·2 per 1,000 as compared with 18·4 in 1902 and with 23·5 the average ratio for the preceding ten years. The infantry regiment quartered at Khartum is changed annually.

Charts for the various commands occupied by British troops in 1903, and for the decennial period 1893–1902, showing the sickness and mortality from enteric fever, the sickness, mortality, and invaliding for tuberculous diseases, the incidence of sickness from malarial fevers, and the incidence of venereal diseases will be found at the end of this report.

Four abstracts have also been prepared to facilitate as much as possible the making of statistical comparisons and to bring together statistics relating to incidence, mortality, and invaliding in detail for the whole army at home and abroad :—

1. Table showing the sickness, mortality and invaliding amongst the European troops in the United Kingdom and Commands Abroad during 1903.
2. Table showing the ratios per 1,000 of strength in regard to the sickness, mortality and invaliding amongst the European troops in the United Kingdom and Commands abroad during 1903.
3. Table showing the ratios per 1,000 of strength in regard to the sickness, mortality and invaliding amongst the European troops in the United Kingdom and Commands Abroad for the decennial periods 1893 to 1902.
4. Table showing the average strength, sickness, mortality, invaliding and constantly sick among the European troops stationed at Home and Abroad during the year 1903 with the ratios per 1,000 of the strength and the average ratios for 10 years.

Some new meteorological tables have been added.

The comparative statistics of results of sickness, in the several commands in which the troops were stationed, are exhibited in the following table :—

1903.

European Troops.	Average Strength.	Admitted into Hospital.	Died.	Sent Home as Invalids.	Discharged as Invalids.	Constantly non-effective from Sickness.
Troops at Home and Abroad	**242,182**	**183,598**	**1,881**	**3,973**	**4,922**	**11,256·36**
United Kingdom ..	110,565	64,892	451	—	2,888	3,895·20
Gibraltar..	4,689	1,861	19	97	44	140·05
Malta	9,313	5,782	59	390	154	422·28
Egypt and Cyprus ..	4,954	3,708	25	72	35	220·39
Canada	1,986	643	6	36	21	39·53
Bermuda	2,577	1,370	9	72	29	72·96
Barbados	882	789	5	26	10	47·85
Jamaica	564	475	2	13	11	25·35
Western Africa.. ..	198	382	3	18	1	13·33
St. Helena	405a	289	3	15	14	18·02
South Africa	27,680	22,083	306	1,071	759	1,661·74
Mauritius	746	643	4	16	6	53·51
Ceylon	1,347	995	15	18	10	51·43
South China	1,220	1,996	13	30	22	112·89
North China	472	369	9	8	—	22·92
Straits Settlements ..	813	1,422	12	29	9	61·74
India	69,613	72,081	928	2,062	909	4,397·17
On board Ship	4,158	3,818	12	—	—	—

1903.

European Troops.	Ratio per 1,000 of Strength.					Average sick-time to each Soldier.	Average duration of each Case of Sickness.
	Admitted.	Died.	Sent Home as Invalids.	Discharged as Invalids.	Constantly non-effective from Sickness.		
Troops at Home and Abroad ..	* **758·1**	† **7·13**	‡ **31·17**	§ **18·95**	‖ **47·29**	Days.‖ **21·73**	Days.‖ **28·77**
United Kingdom ..	586·9	3·41	—	21·83	35·23	12·86	21·91
Gibraltar	396·9	4·05	20·69	9·38	29·87	10·90	27·47
Malta	620·9	6·34	41·88	16·54	45·34	16·55	26·66
Egypt and Cyprus ..	748·5	5·05	14·53	7·07	44·49	16·24	21·69
Canada	323·8	3·02	18·13	10·57	19·91	7·26	22·44
Bermuda	531·6	3·49	27·94	11·25	28·31	10·33	19·44
Barbados	894·6	5·67	29·48	11·34	54·25	19·80	22·14
Jamaica	842·2	3·55	23·05	19·50	44·95	16·41	19·48
Western Africa ..	1929·3	15·15	90·91	5·05	67·32	24·57	12·74
St. Helena	713·6	7·41	37·04	34·57	44·49	16·24	22·76
South Africa	797·8	11·06	38·69	27·42	60·03	21·91	27·47
Mauritius	861·9	5·36	21·45	8·04	71·73	26·18	30·38
Ceylon	738·7	11·14	13·36	7·42	38·18	13·94	18·87
South China	1636·1	10·66	24·59	18·03	92·53	33·77	20·64
North China	781·8	19·07	16·95	—	48·56	17·72	22·67
Straits Settlements ..	1749·1	14·76	35·67	11·07	75·94	27·72	15·85
India	1035·5	13·33	29·62	13·06	63·17	23·06	22·27
On board Ship	918·2	2·89	—	—	—	--	—

* Calculated on strength excluding men detached.
† Calculated on strength including men detached.
‡ Calculated on strength excluding United Kingdom and troops on board ship.
§ Calculated on strength including men detached, and excluding troops on board ship.
‖ Calculations exclude men detached and troops on board ship.

1893 to 1902.

Troops at Home and Abroad.

European Troops.	Aggregate strength for 10 years.	Admitted into Hospital.	Died.	Sent Home as Invalids.	Discharged as Invalids.	Constantly non-effective from Sickness.
Troops at Home and Abroad ..	**2,045,039**	**1,896,649**	**18,410**	**29,268**	**40,718**	**112,543·67**
United Kingdom ..	1,019,487	695,514	5,023	—	28,117	40,358·49
Gibraltar	47,254	31,204	194	773	477	2,227·19
Malta	85,205	71,268	713	2,627	989	4,270·87
Egypt and Cyprus ..	45,536	41,699	609	1,522	564	2,817·71
Canada	15,700	9,783	73	194	135	434·02
Bermuda	14,282	7,173	124	389	107	427·52
Barbados	7,959	9,735	71	200	112	606·09
Jamaica	5,842	4,499	70	178	81	288·84
Western Africa ..	705	1,694	23	128	9	60·52
St. Helena .. .. / South Africa ..	42,559	36,987	314	844	546	2,371·31
Mauritius	6,195	7,569	69	260	62	456·90
Ceylon	14,686	13,219	142	284	109	739·93
South China ..	15,012	24,642	189	820	227	1,388·17
North China ..	—	—	—	—	—	—
Straits Settlements ..	10,863	11,669	79	209	77	698·34
India	659,219	874,840	10,293	20,845	9,106	55,397·77
On board Ship ..	54,535	55,154	424	—	—	—

1893 to 1902.

European Troops.	Ratio per 1,000 of Strength.					Average sick-time to each Soldier.	Average duration of each Case of Sickness.
	Admitted.	Died.	Sent Home as Invalids.	Discharged as Invalids.	Constantly non-effective from Sickness.		
						Days.	Days.
Troops at Home and Abroad ..	**927·4**	**8·57**	**30·14**	**19·44**	**56·54**	**20·64**	**22·31**
United Kingdom ..	682·2	4·47	—	25·03	39·59	14·45	21·18
Gibraltar	660·3	4·11	16·36	10·09	47·13	17·20	26·05
Malta	836·4	8·37	30·83	11·61	50·12	18·30	21·87
Egypt and Cyprus ..	915·7	13·37	33·42	12·39	61·88	22·69	24·66
Canada	623·1	4·65	12·36	8·60	27·64	10·09	16·19
Bermuda	502·2	8·68	27·24	7·49	29·93	10·93	21·75
Barbados	1223·1	8·92	25·13	14·07	76·15	27·80	22·72
Jamaica	770·1	11·98	29·61	13·86	49·44	18·05	23·43
Western Africa ..	2402·8	32·62	181·56	12·77	85·84	31·33	13·04
St. Helena .. .. / South Africa ..	869·1	7·38	19·83	12·83	55·72	20·34	23·40
Mauritius	1221·8	11·14	41·97	10·01	73·75	26·92	22·08
Ceylon	900·1	9·67	19·34	7·42	50·38	18·39	20·43
South China	1641·5	12·59	54·62	15·12	92·47	33·75	20·56
North China	—	—	—	—	—	—	—
Straits Settlements ..	1074·2	7·27	19·24	7·09	64·29	23·46	21·84
India	1827·1	15·61	31·62	13·81	84·04	30·67	23·11
On board Ship ..	1011·4	7·77	—	—	—	—	—

II.—ON THE HEALTH OF THE TROOPS SERVING IN THE UNITED KINGDOM.

Sickness and Mortality.

United Kingdom.

The average strength of warrant officers, non-commissioned officers and men who served in the United Kingdom during the year 1903 was 110,565, according to the returns furnished by medical officers. In addition to this there were certain men detached from their corps, the average number of whom is computed to have been 21,706.

The following table gives the general statistics of sickness and mortality among the troops quartered in the three divisions of the kingdom, England and Wales, Scotland, and Ireland, and also in the United Kingdom as a whole:—

1903.	Average Strength.	Admissions.	Deaths.	Invalids.	Constantly Sick.
England and Wales	83,505	48,134	333	2,216	2,939·26
Scotland	5,151	2,884	34	149	149·63
Ireland	21,909	13,874	84	523	806·31
United Kingdom.. ..	110,565	64,892	451	2,888	3,895·20

(*continued.*)

1903.	Ratios per 1,000 of Strength.				Average Sick Time to each Soldier.	Average Duration of each Case of Sickness.
	Admissions.	Deaths.*	Invaliding.*	Constantly Sick.		
					Days.	Days.
England and Wales ..	576·4	3·32	22·10	35·20	12·85	22·29
Scotland	559·9	5·12	22·42	29·05	10·60	18·94
Ireland	633·3	3·31	20·61	36·80	13·43	21·21
United Kingdom..	586·9	3·41	21·83	35·23	12·86	21·91

* These ratios are calculated on a strength including the men detached.

Comparing the above with the corresponding table in the previous year, it is observed that in England and Wales the admission rate shows a decrease of 11·8 per 1,000, the death rate one of ·77 and the constantly sick rate one of 0·84 per 1,000. The average sick time to each soldier was shorter by 2·49 days, and the average duration of each case of sickness longer by ·22 of a day. Compared with average ratios for the preceding ten years, there was a decrease of 11·7 per 1,000 in the admission rate, of 1·19 in the death rate,

and of 5·78 in the constantly sick rate. The average sick time to each soldier was shorter by 2·11 days, and the average duration of each case of sickness longer by ·74 of a day. *United Kingdom.*

In Scotland the admission rate was lower than in the preceding year by 27·1 per 1,000, but the mortality and constantly sick rates were higher by ·57 and ·01 per 1,000 respectively. The average sick time to each soldier was identical with that for 1902, but the average duration of each case of sickness shows an increase of ·88 of a day. In comparison with the decennial average rates, there is an increase of 22·0 and 3·80 per 1,000 respectively in the admission and constantly sick rates, but the mortality rate shows a decrease of ·35 per 1,000. The average sick time to each soidier and the average duration of each case of sickness were longer by 1·39 and 1·81 days respectively.

In Ireland the admission, death and constantly sick rates were lower than those of the previous year by 161·1, 1·12 and 6·24 per 1,000. The average sick time to each soldier was shorter by 1·28 days, but the average duration of each case of sickness was longer by 1·44 days. In comparison with the ratios of the preceding ten years, the admission, mortality and constantly sick rates show a decrease of 36·4, ·85, and ·86 respectively. The average sick time to each soldier shows a decrease of ·32 of a day, but the average duration of each case of sickness, an increase of ·69 of a day.

In comparison with the previous year, the United Kingdom, as a whole, shows decrease in the admission, death and constantly sick rates of 124·3, ·77, and 6·42 respectively. The average sick time to each soldier shows a decrease of 2·34 days, and the average duration of each case of sickness an increase of ·54 of a day. In comparison with the corresponding ratios for the preceding ten years, decrease has occurred in the admission, mortality and constantly sick rates of 95·3, 1·06 and 4·36 respectively. The average sick time to each soldier shows a decrease of 1·59 days, and the average duration of each case of sickness an increase of ·73 of a day.

The total loss to the service by death and discharge by invaliding on account of medical unfitness during the year was 3,339 men, equal to a ratio of 25·24 per 1,000 of the strength, which is below the previous year's rate by 15·63.

The more important statistics of sickness, mortality, and invaliding, according to the different sections of disease, are given for the whole of the troops in the United Kingdom in Abstract I, and for the troops quartered in the three divisions of the kingdom in Abstracts A, B, and C.

GENERAL DISEASES.—For *eruptive fevers* there were 708 admissions and 5 deaths, giving ratios per 1,000 of 6·4 and ·04, as compared with 10·8 and ·08 in the previous year, and 10·4 and ·07 for the preceding ten years.

For *small-pox* there were 2 admissions during the year, as compared with 11 admissions and 3 deaths in the previous year, and an average of 4 admissions for the preceding ten years. One of the cases occurred in a sapper of the Royal Engineers at Chatham, and the other in a man of the 4th Manchester Regiment stationed in Cork. Both cases recovered, and in neither was the source of infection traced.

Scarlet fever caused 290 admissions and 5 deaths, equal to ratios of 2·6 and ·04 per 1,000, as compared with 3·7 and ·06 in the previous year, and 4·4 and ·06, the decennial average rates. Of the total, 201 cases occurred in England and Wales, 1 in Scotland, and 88 in Ireland. The Dublin, Aldershot, Home, Eastern, Southern and Woolwich districts furnished the highest figures with 74, 52, 35, 30, 25 and 20 respectively: while in the Scottish district only 1 case is recorded; the Belfast and Western districts gave 4 cases, the South-Eastern 7 and the North-Western 9. The greatest number occurring at any one station was 62 at Dublin, which was followed by 52 in Aldershot, 26 in Caterham, 22 in Portsmouth, 20 each in Colchester and Woolwich, 12 in Curragh Camp and 7 in Yarmouth. Of the deaths, 2 occurred at Aldershot, and 1 each at Curragh Camp, Limerick and Tipperary.

Measles caused 109 admissions, but no death occurred. The admission ratio equals 1·0 per 1,000, which is lower than the previous year's rate by 1·8 and than the decennial average rate by 1·5. The admissions in England and Wales numbered 82, in Scotland 5, and in Ireland 22, as compared with

United Kingdom.

240, 1, and 24 respectively in the previous year. The stations most affected were Caterham, Aldershot, Chatham, Portsmouth, and London.

The remaining admissions for eruptive fevers included 298 for cow-pox and 9 for chicken-pox.

Influenza was the origin of 1571 admissions, as compared with 2,221 in the previous year, and 2,328 in 1901. The admission ratio equalled 14·2 per 1,000, which is lower than that given in the previous year by 9·5, and than the decennial average ratio by 4·5. There were 2 deaths, giving a ratio of ·02, which is identical with that for the previous year, and is below the average for the preceding ten years by ·02.

Diphtheria was the cause of 32 admissions and 2 deaths, giving ratios of ·3 and ·02 per 1,000 respectively, as compared with ·8 and ·02 in the previous year, and 1·0 and ·02, the decennial average rates. Of the admissions, 9 occurred in the Woolwich district, 6 in the Eastern, 4 each in the Southern and Home, 3 each in the Thames and South-Eastern, and 1 each in the North-Western, Aldershot, and Dublin districts.

Enteric fever caused 92 admissions, and there were 28 deaths, equal to ratios of ·8 and ·21 per 1,000; the former being lower by ·4 and the latter by ·07 than the previous year's rates; while in comparison with the decennial average ratios there is a decrease of ·5 and ·05 respectively. The percentage of mortality to attack was 30·4 as compared with 30·7 in the previous year, and 21·8, the decennial average. In the three divisions of the United Kingdom the incidence was as follows:—England and Wales, 66 admissions and 20 deaths, equal to ratios of ·8 and ·20 per 1,000, being lower than the corresponding ratios in the previous year by ·4 and ·08; while in comparison with the decennial average rates there is a decrease of ·4 and ·04. In Scotland there were 2 admissions and 1 death as compared with 3 admissions and 1 death in the previous year; the ratio, ·4 and ·15 being lower by ·3 and ·01 than those for the previous year, while compared with the decennial period there is a decrease of ·4 in the admission and an increase of ·02 in the mortality ratio. There were 24 admissions and 7 deaths recorded in Ireland, giving ratios of 1·1 and ·28 per 1,000; the former being ·2 and the latter ·03 below the rates given in the previous year, and as compared with the decennial average rates, both admission and mortality show decrease of ·7 and ·04 respectively.

As regards the incidence of disease by districts, the number of admissions is in the following order:—

Districts.	Number of Admissions.	Districts.	Number of Admissions.
Aldershot	27	Eastern	4
Dublin	10	Belfast	4
Cork	10	Western	3
Southern	9	Salisbury Plain ..	2
Thames	5	Scotland	2
South-Eastern	5	North-Eastern	1
Home	5	Manœuvres	1
North-Western ..	4		

By stations the numbers are as follows, tabulated according to the quarter of the year in which the admissions occurred :— *United Kingdom.*

Stations.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.
Pontefract	—	1	—	—	1
Hulme (Manchester)	1	—	—	—	1
Lichfield	1	—	—	—	1
Warrington..	1	—	—	—	1
Worcester	—	—	—	1	1
Warley	—	—	—	2	2
Weedon	2	—	—	—	2
Devonport	1	—	—	1	2
Pembroke Dock	—	—	—	1	1
Gosport	—	—	1	—	1
Netley	1	—	—	—	1
Parkhurst (I.W.)	—	1	—	—	1
Portsmouth	2	2	2	—	6
Chatham	—	1	—	1	2
Shoeburyness	3	—	—	—	3
Dover, W. Heights	—	—	—	1	1
Shorncliffe	1	1	—	1	3
Brighton	1	—	—	—	1
Oxford	—	—	—	1	1
Reading	1	—	—	—	1
London	1	—	—	1	2
Windsor	—	—	—	1	1
Aldershot	7	15	4	1	27
Bulford Camp	—	—	2	—	2
Ayr	1	—	—	—	1
Perth.	—	—	—	1	1
Belfast	—	—	1	—	1
Holywood	—	1	—	—	1
Londonderry	—	1	—	—	1
Mullingar	1	—	—	—	1
Curragh	1	—	2	—	3
Dublin	—	1	1	5	7
Buttevant	2	4	1	1	8
Cork..	1	—	—	—	1
Kilworth	—	—	1	—	1
Manœuvres.	—	—	1	—	1
Total	29	28	16	19	92

In the majority of instances the origin of the disease could not be traced. In 17 cases the disease is reported as probably contracted in South Africa or on voyage home. In 11 cases the men had recently arrived from other stations, and 9 men had been on furlough shortly before their admission. The eating of shell fish from suspected sources appeared to be the cause in 4 cases. Four men who had been employed in nursing enteric cases contracted the disease, and in 3 cases the disease was contracted prior to enlistment. In 2 cases the disease was thought to be due to defective drainage and contaminated water respectively. As regards the remaining cases no source could be suggested.

Other continued fevers were the cause of 88 admissions but no death occurred. The admission ratio, ·8 per 1,000, shows a decrease of ·7 as compared with the rate for the previous year, and of 2·0 in comparison with the decennial average. For England and Wales, the admission rate was ·8 per 1,000, being lower than the previous year's rate by ·7 and that of the decennial average by 2·0. The admission rate for Scotland was 1·2 per 1,000 or lower than the previous year's and the decennial average rates by ·6 and 1·4 respectively. In Ireland the admission rate was ·8 per

nited ingdom.

1,000, showing a decrease as compared with the previous year of ·7 and in comparison with the decennial average rate of 2·2. The highest rates in districts are shown in the North-Eastern, North-Western, Eastern, Channel Islands, Salisbury Plain, Scottish and Home Districts with 2·0, 2·0, 1·4, 1·2, 1·2, 1·2, and 1·2 respectively. The lowest rates are given by Woolwich, Aldershot, Dublin, Southern and Belfast districts, with ·2, ·3, ·5, ·5, and ·8 respectively. In the Thames and South-Eastern districts there were no admissions under this head. The admissions comprised 81 cases of simple continued fever, 5 of Mediterranean fever, and 2 of typhus.

Dysentery was the cause of 94 admissions and 1 death, giving ratios of ·8 and ·01 respectively. The admission ratio shows a decrease of ·5 as compared with the previous year and is identical with the decennial average ratio. Of the admissions, 21 occurred in the Aldershot district, 11 in Home, 10 each in the South-Eastern and Cork districts, 7 each in the Thames and Dublin, 5 in the Western, 4 each in Salisbury Plain and Scottish districts, 3 each in the North-Western, Eastern, and Woolwich, 2 each in North-Eastern and Belfast districts, and 1 each in the Channel Islands and among troops on manœuvres.

Under *mumps* 78 admissions are recorded, as compared with 83 in 1902. Of the cases, 21 occurred in the Home district, 10 in Aldershot, and 8 in the South-Eastern districts.

Malarial Fevers.—Under this head 855 admissions were recorded, equal to a ratio of 7·7 per 1,000, which shows an increase of ·8 as compared with the previous year's rate and a similar increase in comparison with the decennial average. There was no death under this heading. Of the admissions, England and Wales furnished 664, Scotland 14, and Ireland 177. Of the total cases 841 are returned as ague and 14 as remittent fever.

Septic Diseases caused 69 admissions and 11 deaths. 58 of the admissions with 2 deaths were due to erysipelas, septicæma accounted for 7 admissions and 5 deaths, pyæmia caused 3 admissions and 4 deaths, and there was also a single case of phagedæna. The admission rate, as compared with that of the previous year, shows a decrease of ·4, and in comparison with the decennial average of ·6; while the death rate in both comparisons shows an increase of ·02.

The comparisons in the three divisions of the United Kingdom are as follows:—

	Ratio per 1,000 of strength.					
	Admissions.			Deaths.		
	1903.	1902.	1893–1902.	1903.	1902.	1893–1902.
England and Wales	·6	1·0	1·3	·09	·04	·07
Scotland	1·2	·7	1·3	·15	·16	·11
Ireland	·5	1·1	1·0	·04	·12	·03

Tubercular Diseases were the origin of 293 admissions and 48 deaths, the equivalent ratios being 2·7 and ·36 per 1,000, which, compared with those of the previous year, show a decrease of 1·4 in the former and ·25 in the latter, and in comparison with the decennial average ratios there is a decrease of ·7 and ·30 respectively. Tubercle of lung furnished 256 of the admissions and 42 of the deaths.

The comparisons in the three divisions are as follows:— *United Kingdom.*

	Ratio per 1,000 of Strength.					
	Admissions.			Deaths.		
	1903.	1902.	1893–1902.	1903.	1902.	1893–1902.
England and Wales	2·6	4·0	3·4	·32	·68	·63
Scotland	2·3	4 6	3·5	·90	·32	·92
Ireland	2·8	4·3	3·5	·35	·43	·71

The incidence of tubercular disease year by year amongst the troops in the United Kingdom is shown in the following table:—

Year.	Ratio per 1,000 of strength.			Remarks.
	Admitted.	Died.	Invalided.	
1886	3·9	1·17	1·60	
1887	3·6	1·10	1·65	
1888	3·7	1·03	1·65	
1889	3·6	·92	1·72	
1890	3·9	1·02	2·11	
1891	3·2	·76	1·81	
1892	3·1	·79	1·67	
1893	3·1	·76	1·60	
1894	3·2	·80	1·58	
1895	3·0	·67	1·56	
1896	2·6	·61	1·63	Includes scrofula, in accordance with the nomenclature of diseases, 1896.
1897	2·4	·52	1·44	
1898	2·5	·48	1·36	
1899	2·8	·59	1·42	
1900	3·7	·78	1·81	
1901	4 9	·71	·59	
1902	4·1	·61	2·08	
1903	2·7	·36	1·57	

Venereal Diseases.—For *primary syphilis* there were 1,957 admissions, giving a ratio of 17·7 per 1,000, as compared with 22·2 in 1902 and 33·8 the

United Kingdom.

average ratio for the decennial period. The ratio of constantly sick was 1·86 per 1,000, which is lower than that of the previous year by ·19, and than the decennial average rate by 1·48 per 1,000. *Soft chancre* was the cause of 1,764 admissions and 146·09 men constantly sick, equal to ratios of 16·0 and 1·32 per 1,000. In England and Wales the admissions and constantly sick numbered 1,244 and 110·10, in Scotland 115 and 7·76, and in Ireland 405 and 28·23. Adding the admissions to those for primary syphilis, the ratios of admission and of constantly sick for primary venereal sores in the United Kingdom amounted to 33·6 and 3·18 per 1,000 respectively, the admission rate being lower than that for the previous year by 1·2, and the constantly sick ratio shows an increase of ·06, while in comparison with the decennial average rates both show decrease of 13·7 and 1·25 respectively.

Secondary Syphilis.—The admissions under this head numbered 3,158, the deaths 5, and the constantly sick 389·94, giving ratios of 28·6 per 1,000 for admissions and 3·53 per 1,000 for constantly sick, which show an increase of 4·8 and ·91 respectively as compared with similar ratios in 1902, and an increase of 1·7 and ·59 in comparison with the decennial average rates.

Gonorrhœa was the cause of 6,947 admissions, and 566·97 men were constantly ineffective from this disease; the ratios equalled 62·8 and 5·13 per 1,000 respectively, the former showing a decrease of 1·3, and the latter an increase of ·92 as compared with the previous year, while in comparison with the decennial average rates the former shows a decrease of 4·1 but the latter an increase of ·41.

The incidence of the several forms of venereal disease in the three divisions of the United Kingdom in 1903 as compared with 1902, and with the preceding decennial period, is shown in the following table :—

Disease and Division.		Ratio per 1,000 of Strength.					
		Admissions.			Constantly Sick.		
		1903.	1902.	1893–1902.	1903.	1902.	1893–1902.
Primary Syphilis.	England and Wales ..	17·9	21·7	35·3	1·92	2·14	3·59
	Scotland	16·7	15·0	20·7	1·41	·94	1·64
	Ireland	17·0	25·3	31·0	1·69	1·97	2·85
Primary venereal sores (*i.e.*, Primary Syphilis and Soft Chancre).	England and Wales ..	32·8	33·3	49·2	3·24	3·20	4·75
	Scotland	39·0	26·0	30·9	2·92	1·51	2·26
	Ireland	35·5	41·9	43·8	2·98	3·18	3·82
Secondary Syphilis.	England and Wales ..	29·1	25·1	28·8	3·78	2·87	3·26
	Scotland	27·2	16·8	17·1	2·48	1·65	1·32
	Ireland	26·7	21·0	22·1	2·80	1·96	2·19
Gonorrhœa.	England and Wales ..	61·5	64·1	68·2	5·33	4·30	4·86
	Scotland	76·7	52·5	57·7	4·18	2·59	3·26
	Ireland	64·5	66·6	64·5	4·58	4·28	4·46

Taking *all forms of venereal disease* together, the admissions in the United Kingdom numbered 13,826, and the constantly sick 1308·02. The total ratio of admissions for venereal diseases, therefore, was 125·0, and that of constantly sick 11·84 per 1,000, being higher than the preceding year's ratios by 2·3 and 1·89, but lower than the average of the preceding ten years by 16·1 and ·25 per 1,000 respectively.* *United Kingdom.*

The incidence of all forms of venereal diseases taken together shows the following comparisons :—

	Ratio per 1,000 of strength.					
	Admissions.			Constantly Sick.		
	1903.	1902.	1893–1902.	1903.	1902.	1893–1902.
England and Wales	123·4	122·4	146·2	12·35	10·37	12·87
Scotland	142·9	95·3	105·7	9·58	5·75	6·84
Ireland	126·7	129·5	130·4	10·36	9·44	10·47

The following shows the admission rates for all venereal diseases according to districts :—

Districts.	Ratio per 1,000 of Strength.			
	1903.	1902.	Increase or decrease.	
Dublin	184·2	167·4	+ 16·8	
Western	170·8	182·9		−12·1
Home	165·4	179·1		−13·7
Woolwich	161·5	141·7	+ 19·8	
North-Eastern	158·8	149·8	+ 9·0	
Scottish	142·9	95·3	+ 47·6	
Southern	141·6	140·9	+ ·7	
Belfast	134·2	127·9	+ 6·3	
Aldershot	115·7	86·0	+ 29·7	
Channel Islands	101·4	82·7	+ 18·7	
Salisbury Plain	98·6	80·8	+ 17·8	
Eastern	94·5	92·6	+ 1·9	
South-Eastern	94·2	95·2		− 1·0
Thames	90·7	111·7		−21·0
North-Western	90·4	93·0		− 2·6
Cork	57·5	81·0		−23·5
Manœuvres	32·1			

* There were 136 admissions for ulcer of penis of non-venereal origin with 10·95 men constantly sick. If, as in former years (prior to 1897), these cases were included with those of primary syphilis and soft chancre under the head of primary venereal sores, the admission and constantly sick rates for all forms of venereal diseases in the United Kingdom would equal 126·2 and 11·94 per 1,000 respectively.

United Kingdom.

The incidence of venereal disease in stations, the average annual strength of which exceeded 1,000, was as follows:—

Station.	Strength.	Ratio per 1,000 of Strength. Admissions for Venereal diseases.	Station.	Strength.	Ratio per 1,000 of Strength. Admissions for Venereal diseases.
Dublin	4,572	269·0	Cork	1,213	133·6
Devonport	2,844	254·2	Colchester	3,300	116·7
London	3,658	253·7	Aldershot	19,724	116·3
Portsmouth (Gosport, Hilsea and Portsmouth).	4,309	191·5	Chatham	3,268	112·0
			Shorncliffe	3,045	109·4
Edinburgh (Edinburgh Castle, Piershill, Leith Fort and Glencorse.)	1,475	176·9	Lichfield	1,146	102·1
			Bulford Camp ..	4,108	98·6
			Dover	2,064	93·5
Woolwich	5,484	161·6	Hounslow	1,230	93·5
Curragh Camp ..	2,690	147·2	Canterbury	1,161	88·7
York	1,378	140·1			

Amongst stations with an average annual strength varying between 500 and 1,000 the ratios of venereal disease were as follows:—

Station.	Strength.	Ratio per 1,000 of Strength. Admissions for Venereal diseases.	Station.	Strength.	Ratio per 1,000 of Strength. Admissions for Venereal diseases.
Holywood	522	346·7	Pembroke	807	84·3
Glasgow	709	306·1	Warley	903	77·5
Sheffield	659	248·9	Newbridge	560	76·8
Belfast	917	237·7	Shoeburyness ..	735	70·8
Newcastle	771	227·0	Fort George ..	873	69·9
Parkhurst (I.W.) ..	517	147·0	Gravesend	614	61·9
Windsor	969	135 2	Caterham	844	59. 2
Guernsey	547	131·6	Limerick	838	41·8
Preston	765	126·8	Sheerness	628	41·4
Exeter	523	126·2	Kilworth	619	38·8
Norwich	501	113·8	Queenstown ..	778	34·7
Woking	560	96·4	Kildare	568	- -
Fermoy	917	91·6			

Amongst stations with an average strength varying between 100 and 500, the ratios were as follows:— *United Kingdom.*

Station.	Strength.	Ratio per 1,000 of Strength. Admissions for Venereal diseases.	Station.	Strength.	Ratio per 1,000 of Strength. Admissions for Venereal diseases.
Leeds	256	418·0	Hamilton	321	56·1
Fort Tregantle ..	241	332·0	Portland	429	55·9
Stobs..	261	268·2	Reading	235	55·3
Delamere Camp ..	113	185·8	Youghal	205	53·7
Ballykinler	248	177·4	Berwick	153	52·3
Bradford	290	169·0	Elizabeth Castle (Jersey).	101	49·5
Ipswich	278	147·5			
Brighton	347	138·3	Oxford	205	48·8
Manchester (Hulme)	306	134·0	Wrexham	166	48·2
Fort Regent (Jersey)	356	129·2	Landguard Fort ..	296	47·3
Halifax	129	124·0	Warwick	213	47·0
Netley	315	123·8	Northampton ..	231	43·3
Birmingham.. ..	133	112·8	Dorchester.. ..	376	42·6
Ballincollig	295	108·5	St. Peter's (Jersey)	259	42·5
Liverpool (Seaforth)	407	108·1	Devizes	236	42·4
Aberdeen	318	103·8	Chester	237	42·2
Bury (Lancs.) ..	232	103·4	Naas	168	41·7
Newport	288	100·7	Lancaster	244	41·0
Falmouth	171	99·4	Weymouth.. ..	271	40·6
Leicester	204	98·0	Kingston	299	36·8
Ayr	186	96·8	Warrington ..	299	36·8
Bedford	186	96·8	Cahir	366	35·5
Londonderry ..	367	95·4	Dundalk	422	35·5
Mullingar	452	92·9	Buttevant	316	34·8
Scarborough.. ..	185	91·9	Pontefract	408	34·3
Kilkenny	120	91·7	Lydd	442	33·9
Lincoln	168	89·3	Inverness	149	33·6
Alderney	443	88 0	Montrose	122	32·8
Derby	184	87·0	Clonmel	425	30·6
Okehampton ..	355	84·5	Yarmouth	167	29·9
Cardiff	204	83·3	Omagh	172	29·1
Fleetwood	115	78·3	Winchester.. ..	348	25·9
Carlisle	141	78·0	Weedon	351	25·6
Templemore.. ..	270	77·8	Shrewsbury ..	172	23·3
Magilligan Camp ..	186	75·3	Brecon	176	22·7
Altcar	150	73·3	Guildford	190	21·1
Enniskillen	165	72·7	Tipperary	398	20·1
Perth..	167	71·9	Richmond	207	19·3
Stirling	237	71·7	Chichester.. ..	158	19·0
Bristol	335	71·6	Ballinahina . ..	230	17·4
Finner Camp ..	210	71·4	Hythe	134	14·9
Worcester	127	70·9	Waterford	135	14·8
Barry Camp . ..	113	70·8	Bury St. Edmunds	182	11·0
Taunton	183	65·6	Galway	191	10·5
Athlone	321	65·4	Glen Imaal.. ..	205	9·8
Beverley	223	62·8	Tralee	201	5·0
Ashton-under-Lyne..	164	61·0	Birr..	228	4·4
Bodmin	213	61·0	Kinsale	459	2·2
Maidstone	203	59·1	Armagh	197	—
Golden Hill Fort (I.W.)	439	57·0			

Parasitic Diseases.—Under this head were recorded 4,445 admissions with 161·96 men constantly sick, giving ratios of 40·2 and 1·47 per 1,000 respectively, as compared with 31·2 and 1·20 in 1902. Of the total admissions, scabies furnished 4,018, or 90 per cent. of this class of diseases. There were

United Kingdom.

132 admissions for ringworm, 107 for phthirius inguinalis, 69 for bilharzia hæmatobia, 50 for pediculus, and 49 for tænia solium. The ratios per 1,000 for scabies were, in England 33·0, in Scotland 32·8, and in Ireland 49·8. The cases of bilharzia hæmatobia all occurred in men who had served in South Africa.

For *scurvy* there was one admission, at Gosport, as compared with one admission at Woolwich during the preceding year.

Alcoholism accounted for 166 admissions and 4 deaths. Of the admissions 6, and of the deaths 2, were due to delirium tremens. The ratio per 1,000 of admissions for alcoholism equalled 1·5, and that of mortality ·03, the former being lower by 1·1 and the latter by 0·3 than the corresponding ratios for the previous year; while in comparison with the decennial average rates, a decrease of ·7 is shown in the admission and of ·03 in the mortality rate. In England and Wales the admission rate was 1·4, in Scotland 1·0, and in Ireland 1·8 per 1,000.

Rheumatism.—Under this head 1,929 admissions and 1 death are recorded, giving ratios of 17·4 and ·01 per 1,000 respectively, which are below the corresponding ratios in the previous year, by 8·2 and ·01, and those of the decennial average by 12·7 and ·05 per 1,000 respectively.

The comparisons in the three divisions are as follows :—

	Ratio per 1,000 of strength.					
	Admissions.			Deaths.		
	1903.	1902.	1893-1902.	1903.	1902.	1893-1902.
England and Wales	17·4	24·7	31·1	·01	·01	·07
Scotland	19·8	19·8	22·1	—	—	·04
Ireland	17·3	29·9	28·3	—	·08	·06

Among the districts, the greatest prevalence was in the Home, North-Western, Scottish, Belfast, Thames, Dublin, and Southern, with 26·5, 19·8, 19·8, 19·2, 19·1, 18·8, and 17·7 per 1,000 respectively; and the lowest in the Woolwich, Salisbury Plain, South-Eastern, Cork, Channel Islands, North-Eastern, Aldershot, Eastern and Western with 10·4, 13·4, 14·4, 14·4, 15·2, 16·4, 16·4, 16·5, and 16·7.

Of the total admissions, 116 were for rheumatic fever; the death was due to rheumatism.

Debility.—There were 1,050 admissions recorded under this head, as compared with 1,468 in 1902, the ratio, 9·5 per 1,000, showing a decrease of 6·2 as compared with the rate in the previous year, and of ·7 as compared with the decennial average. There were no deaths.

Other general diseases accounted for 528 admissions, with 15 deaths, giving ratios of 4·8 and ·11 respectively, the former showing a fractional decrease (·3), but the latter an increase of ·06 when compared with the rates for the previous year. The admissions included 237 cases of non-malignant new growth, 93 of anæmia, 59 of cyst, 18 of malignant new growth, and 121 for other ailments (including 78 cases of mumps already referred to).

The deaths were due to malignant new growth 11, non-malignant new growth 2, anæmia 1, and leucocythæmia 1.

LOCAL DISEASES.—*Diseases of the Nervous System.*—There were 853 admissions and 36 deaths recorded under this heading, giving ratios of 7·8 and ·28 per 1,000 respectively, the former showing a decrease of 3·8 as compared with the rate in 1902, while the latter is identical with the mortality ratio for that year. Compared with the decennial average rate there is a decrease of 1·9 and ·01. For England and Wales

the ratios were for admission 7·5, and for mortality ·27, the former showing a decrease of 3·4, but the latter an increase of ·02, while in comparison with the decennial average rates there is a decrease of 2·1 and ·04 respectively. Scotland, with admission and mortality rates of 7·4 and ·60, shows decrease as compared with similar ratios given in 1902 of 2·8 and ·05, while in comparison with the average rate the former shows a decrease of 2·0, but the latter an increase of ·23. In Ireland the admission and mortality rates equalled 8·6 and ·20 respectively, showing a decrease of 5·8 in the former and 0·7 in the latter as compared with the corresponding rates in the previous year, and in comparison with the decennial average rates a decrease is shown of 1·3 and ·02 respectively. *United Kingdom.*

The admissions for nervous diseases included 182 for *mental disorders*, for which 1 death is shown. The admission ratio shows a decrease of ·9 as compared with the previous year's rate, but is identical with the decennial average. England and Wales gave a ratio of 1·6, which is lower than that given in the previous year by 1·0, but similar to the average rate. Scotland, with a rate of 1·2, shows a decrease of ·9 as compared with the previous year's rate, and one of ·6 with the average. Ireland gave a rate of 1·8, or lower than the rate given in 1902 by 1·1, and than the average by ·1.

Excluding cases of mental disease, the principal causes of admission were :—neuralgia 217 cases, epilepsy 153, vertigo 48, nervous weakness 43, paralysis 34, headache and megrim 33, neuritis 21, and hysteria 18.

Including mental disorders, the deaths were recorded under hæmorrhage of brain 10 cases, inflammation of brain and its membranes 9, abscess of brain 4, apoplexy, paralysis, and epilepsy 3 cases each, myelitis 2, and softening of brain and dementia 1 case each.

Diseases of the Eye were the cause of 1,304 admissions, equal to a ratio of 11·8 per 1,000, or a decrease of 2·5 as compared with the previous year's rate and of ·4 in comparison with the average ratio. England and Wales, with a ratio of 11·3 per 1,000, shows a decrease as compared with the previous year's and the decennial average rates of 2·1 and ·7 respectively. Scotland furnished a ratio of 12·0 per 1,000, which is below the previous year's rate by ·7, but above the decennial average by 2·7. Ireland gave a ratio of 13·7, which is 4·0 below that given in the previous year, but fractionally higher (·2) than the decennial average rate. The chief causes of admission were conjunctivitis 682 cases, ametropia 134, affections of the cornea 120, iritis 72, blepharitis 65, myopia 58, and various other affections of the eye 173 cases.

Diseases of other Organs of Special Sense caused 943 admissions, equal to a ratio of 8·5 per 1,000, which compared with the previous year's rate shows a decrease of 3·7 and with the decennial average one of ·9. England and Wales gave a ratio of 9·0, showing a decrease on the previous year's rate and the decennial average of 2·7 and ·8 respectively. Scotland, with a ratio of 7·0 per 1,000, shows a decrease of 4·5 as compared with the previous year's rate, and an increase of 1·9 in comparison with the average rate. For Ireland the admission ratio was 6·9 which is below the previous year's rate and the decennial average by 6·9 and 1·8 per 1,000 respectively. Of the total admissions, 485 were for inflammation of the external meatus, 342 for diseases of the middle ear (including 159 of perforation and 115 for inflammation of membrana tympani), and 59 for deafness. There were 39 cases of nasal affection, including 18 each for rhinitis and epistaxis. Two deaths were recorded, both due to inflammation of middle ear.

Diseases of the Circulatory System caused 1,416 admissions and 50 deaths, the equivalent ratios being 12·8 and ·38 per 1,000, both of which are lower than similar rates given in the previous year by 9·9 and ·07, and than the decennial average rates by 1·0 and ·03 per 1,000 respectively.

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[illegible] of which occurred in [illegible] and [illegible] pneumonia 1 each, and [illegible], empyema, oedema of larynx and [illegible]

[illegible] was the cause of 2,057 admissions and [illegible] having 2·2 and 23 per 1,000, showing a [illegible] but an increase of ·07 on the death [illegible] while in comparison with the [illegible] shows a decrease of 23% but that [illegible]

The comparisons in the three divisions are as follows :— *United Kingdom.*

	Ratio per 1,000 of strength.					
	Admissions.			Deaths.		
	1903.	1902.	1893–1902.	1903.	1902.	1893–1902.
England and Wales	83·7	110·8	110·4	·34	·27	·31
Scotland	61·7	87·2	76·4	—	·16	·32
Ireland	81·2	115 5	97·0	·39	·27	·28

Among the admissions were 5,890 cases of affections of the mouth and throat, 802 of indigestion, 490 of hernia, 386 of diarrhœa, 379 of colic, 251 of piles, 356 of hepatic diseases (including 182 of jaundice, 91 of hepatitis, 54 of congestion of liver, and 19 of abscess of liver), and 178 of inflammation of intestines.

The deaths were from abscess of liver 13, typhlitis 7, cirrhosis of liver 5, peritonitis 4, inflammation of stomach, ulceration of stomach, enteritis, hepatitis, and intestinal obstruction 2 each, and 1 each from colitis, acute yellow atrophy of liver, rupture of intestines, contraction of intestines and dropsy.

Diseases of the Lymphatic System were the cause of 706 admissions, giving a ratio of 6·4 per 1,000, which shows a decrease of 1·1 as compared with the previous year's rate and of 3·9 in comparison with the decennial average ratio.

The admission rate in England and Wales was 5·9, which shows a decrease of 1·3 in comparison with the previous year's rate and of 4·9 as compared with the decennial average rate. In Scotland the admission rate was 5·6, showing a decrease of ·2 in comparison with the previous year's rate and of ·4 as compared with the average ratio. Ireland, with an admission rate of 8·4, shows decrease as compared with the previous year's and the decennial average ratios of ·1 and 1·1 respectively. The admissions were chiefly due to inflammation of lymphatic glands, inflammation of lymphatic vessels, and suppuration of lymphatic glands. There was no death.

Diseases of the Urinary System were the origin of 305 admissions and 18 deaths, equal to ratios of 2·8 and ·14 per 1,000. Compared with the previous year, the admission rate shows a decrease of 1·9, but that of mortality an increase of ·05, and in comparison with the average ratio of the preceding ten years the former shows a decrease of ·1, and the latter an increase of ·02.

The comparisons in the three divisions are as follows :—

	Ratio per 1,000 of strength.					
	Admissions.			Deaths.		
	1903.	1902.	1893–1902.	1903.	1902.	1893–1902.
England and Wales.. ..	2·7	4·9	2·9	·15	·10	·12
Scotland	3·3	3·5	2·4	·30	·16	·13
Ireland	3·0	4·6	2·9	·04	·04	·10

United Kingdom.

The majority of the admissions were due to incontinence of urine 104 cases, acute nephritis 44, Bright's disease 43, hæmaturia 38, cystitis 30, and retention of urine 10 cases. The deaths were due to Bright's disease 9, acute nephritis 6, and abscess of kidney 3.

Diseases of the Generative System.—There were 3,254 admissions (including 1,764 for soft chancre, already referred to under the heading of venereal diseases), equal to a ratio of 29·4 per 1,000, which is above the rate given in the previous year, and that of the decennial average by 1·8 and 2·7 respectively. For England and Wales the ratio was 27·7, or higher than the previous year's rate by ·8, and than the decennial average ratio by ·5. In Scotland, the rate equalled 38·4, and is higher than the previous year's rate and that of the decennial average by 13·5 and 15·8 respectively. Ireland, with a ratio of 34·0, is above the previous year's rate by 3·1 and the decennial average ratio by 8·5.

In addition to the cases of soft chancre, there were included among the admissions 468 cases of balanitis, 449 of orchitis, 170 of varicocele, 130 of ulcer of penis, 67 of hydrocele, 65 of stricture of urethra, 50 of phimosis, and 40 of paraphimosis. There was no death.

Diseases of the Organs of Locomotion gave 1,549 admissions or a ratio of 14·0 per 1,000, which is below the previous year's rate by 3·5, but higher than the decennial average rate by 1·2. England and Wales gave an admission rate of 14·3, which shows a decrease as compared with the previous year's rate of 2·9, but an increase on the decennial rate of 1·6. Scotland, with a rate of 14·0 per 1,000, shows an increase in both comparisons to the extent of ·6 and 3·4 respectively. In Ireland the ratio was 13·0, which shows a decrease of 6·7 as compared with the previous year's rate and of ·2 in comparison with the average rate for the preceding ten years.

The majority of the admissions were due to synovitis, myalgia, flat feet, deformities of toes, and periostitis. There was 1 death, from psoas abscess.

Diseases of the Connective Tissue caused 2,611 admissions, giving a ratio of 23·6 per 1,000, which, compared with that given in 1902, and with the decennial average, shows a decrease of 5·1 and 2·3 respectively.

The comparisons in the three divisions are as follows :—

	Ratio per 1,000 of strength.					
	Admissions.			Deaths.		
	1903.	1902.	1893-1902.	1903.	1902.	1893-1902.
England and Wales	22·5	26·8	25·8	—	—	·01
Scotland	20·8	22·3	23·5	—	—	—
Ireland	28·4	36·8	27·0	·04	—	·01

Inflammation and abscess of connective tissue furnished all the cases except 6 ; of these, 4 were for œdema, 1 for gangrene (which terminated fatally), and 1 for hæmorrhage.

Diseases of the Skin caused 5,123 admissions, giving a ratio of 46·3 per 1,000, which is below the previous year's and the decennial average ratios by 11·6 and 3·9 respectively.

The admission rates for the three divisions are as follows :— *United Kingdom.*

	Ratio per 1,000 of strength.		
	1903.	1902.	1893–1902.
England and Wales	44·7	54·4	48·3
Scotland	44·3	51·3	49·4
Ireland	53·2	71·7	56·3

The chief causes of admission were boils 1,413, eczema 1,363, whitlow and onychia 689, ulcer 630, impetigo 207, psoriasis 200, and urticaria 127.

INJURIES.—For injuries of all kinds there were 9,476 admissions into hospital and 85 deaths, the equivalent ratios being 85·8 and ·62 per 1,000, which are below the corresponding ratios in the previous year, by 11·7 and ·08 respectively; and in comparison with the decennial average rates there is a decrease of 14·6 in the admission ratio and of ·06 in the mortality rate.

For *general injuries* there were 18 admissions and 34 deaths, as compared with 37 admissions and 41 deaths in the previous year; the ratios ·2 and ·26 showing decrease of ·2 and ·07 respectively as compared with those for 1902. Multiple injury caused 6 admissions, burns and scalds 4, sun-stroke 4, heat-apoplexy 2, and 1 each from effects of chemical irritants and suffocation from strangulation. Of the cases of sun-stroke, 1 each occurred in the North-Western, Eastern, Aldershot, and Dublin Districts.

The deaths were :—16 from suffocation from submersion, 10 from multiple injury, 3 from shock, 2 from suffocation from strangulation, and 1 each from lightning stroke, suffocation from plugging of air passages, and suffocation from gaseous poisons. By districts, the deaths from drowning were :—South-Eastern 3, Home 3, North-Western 2, Western 2, Cork 2, Southern 1, Thames 1, Channel Islands 1, and Scottish 1. In ten instances the verdict "accidentally drowned" was given, in five "found drowned," and in the remaining instance no information was given.

Of the 10 deaths from multiple injury, 6 were the result of accidents on the railway; and under "thrown from a horse at field training," "accident on a bicycle," "crushed by a hut falling," and "accident at the Royal Arsenal, Woolwich," are shown 1 death each.

Of the cases of suffocation from strangulation 1 was returned as suicidal and in the other there was not sufficient evidence to show the state of mind. The case of lightning stroke was a driver of the Army Service Corps, struck by electric fluid while driving a wagon near Hare Park, Curragh. The case of gaseous poisoning was from suffocation by smoke, caused by a barrack hut catching fire at Blackdown Camp. In the case of death from plugging of air passages, a verdict was returned of "death from natural causes." Of the cases of shock, 2 occurred in London, and 1 in Aldershot, caused by a blow when fighting in barracks. In the latter case a verdict of "manslaughter" was returned.

Local Injuries caused 9,450 admissions and 51 deaths, as compared with 8,922 admissions and 46 deaths in the previous year. The most frequent causes of admission were wounds 2,597, strains or sprains 2,495, contusions 2,173, blisters of feet 644, fractures 590, and abrasions 442.

The deaths were 27 from gunshot wound, 7 from fracture of skull, 6 from wound of neck, 2 from dislocation of spine, 2 from fracture of spine, 2 from concussion of brain, and 1 each from rupture of bladder, compression of brain, concussion of spinal cord, rupture of heart, and rupture of artery.

Of the deaths from gunshot wound 21 were suicidal, 4 were accidental, and 2 were homicidal. The cases of wounds of neck are all shown as suicidal. All the other deaths from local injury were due to accidents.

United Kingdom.

Poisons.—There were 55 admissions and 4 deaths recorded under this head; of the admissions 40 are returned as due to decayed or poisonous food, 4 to oxalic acid, 4 to poisonous fungi, 2 to dead animal matter, and 1 each to ammonia, ether, opium, iodine, and morbid secretions.

The deaths were due to ammonia poisoning, cyanide of potassium, chloroform, and ether.

Suicides.—There were 32 cases in the year under report, as compared with 32 cases in the previous year, and 26, the average for the preceding ten years. The mode of suicide was gunshot wound in 21 cases, wound of throat 6, multiple injury 2, suffocation by strangulation 2, and poisoning 1 (cyanide of potassium). Twenty-four of the cases occurred in England and Wales, 3 in Scotland and 5 in Ireland. In 23 cases a verdict of temporary insanity was given, 2 are shown as suicide, 1 as felo de se, in 1 case it is reported no verdict was recorded, in another no inquest was held, and in the remaining 4 cases the mental condition is not stated.

Surgical Operations.—Exclusive of the operations performed at the Army Medical School, Netley, the surgical operations necessitated by the various cases admitted to military hospitals in the United Kingdom during the year were more numerous than in the preceding year.

In accordance with the classification given in the nomenclature of diseases, the following indicates the number of operations under the several headings:—Removal of tumours, 19; of cysts, 4; evacuation of abscesses, 61; removal of foreign bodies, 6; operations on the blood vessels, 54; on the lymphatic organs, 59; on nerves, 2; on the skin and subcutaneous tissue, 54; on bones, 32; on joints, 17; on muscles and tendons, 12; amputations, 55; operations on the skull and brain, 8; on the spine and spinal cord, 1; on the face, nasal cavities, and mouth, 23; on the eye and its appendages, 13; operations on the ear, 10; on the thorax and breast, 9; on the abdomen, 180; on the rectum and anus, 54; on the bladder and urethra, 6; and on male generative organs, 161.

A large number of the operations call for no special remark. The operations on the blood vessels consisted of 48 for varix, 5 for ligature of arteries, and 1 for thrombosis. The operations on bones were for fracture, removal of necrosed bones, wiring of fragments of bone, scraping of bones, and for periostitis. The operations on joints were chiefly for reduction of dislocation and on account of synovitis. The cases of amputation were 2 of thigh, 1 of leg, 2 of arm, 9 of fingers, and 41 of toes. The operations on the skull and brain were 5 of trephining, 2 for fracture, and 1 for removal of loose bone from wound. Operations on the face, nasal cavities, and mouth were for extraction of teeth 11, inflammation of nose 4, removal of tonsils 3, operation on the lower jaw 1, hare lip 1, deviation nasal septum 1, ulcer of upper lip 1, and necrosis of alveoli 1. Operations on the eye included 3 for excision of eye-ball, 4 for strabismus, 2 for wound of cornea, 1 for iritis, 1 for traumatic cataract, 1 for purulent ophthalmia, and 1 for necrosis of the orbit and neighbouring parts. The operations on the thorax and breast comprised 7 for empyema, 1 for the removal of bone in the case of gunshot wound, and 1, an excision of the breast, in which a mauser bullet was found. The majority of operations on the abdomen were for the radical cure of hernia. There were also 9 operations for abscess of liver, 10 for typhlitis, 5 for inflammation of liver, 2 for appendicitis, 1 for peritonitis, 1 for abscess of kidney, 1 for ascites, 1 for intestinal obstruction, and 2 for hydronephrosis of kidney. The operations on rectum and anus included 30 for piles, 21 for fistula in ano, 2 for abscess of rectum, and 1 for tubercle of rectum. Under operations of the bladder and urethra there were 2 for rupture of bladder, 2 for fistula of urethra, and 2 for calculus of bladder. The operations on the male generative organs included 66 for varicocele, 62 of circumcision, chiefly on account of phimosis, 21 for hydrocele, 7 of castration, 3 for phagedenic sore, 1 for abscess of testicle, and 1 for hæmatocele. There were 27 deaths, viz., 3 after operation for inflammation of middle ear, 3 after operation for abscess of liver, 3 after operations for trephining, 2 after evacuation of abscesses, 2 after operation for malignant new growth (1 sarcoma and 1 carcinoma), 2 after operation for perinephritic abscess, 1 each after operations for appendicitis, rupture of bladder, gunshot wound of head, fistula in ano, amputation

of right thigh, intraperitoneal abscess in a case of typhlitis, intestinal obstruction, aneurysm (cœliac axis), inflammation of liver in which general tubercle supervened, hydrocele in which tubercle of lung supervened, operation on gangrenous tissue, and 1 from ether while undergoing examination for piles. *United Kingdom.*

Chloroform was the anæsthetic used in the majority of cases; ether was also used (147 instances), while cocaine, ethyl chloride, A.C.E. mixture, ether and nitrous oxide gas, oxygen and ether, and gas were used in a few instances.

INVALIDING.—The number of men discharged the service during the year was 2,888, giving a ratio of 21·83 per 1,000, which is below the previous year's rate and that of the decennial average by 14·86 and 3·20 respectively.

There were 2,216 men invalided in England and Wales, equal to a ratio of 22·10 per 1,000, which is lower than that of the previous year and the average rate for the decennial period by 13·65 and 3·93 respectively. In Scotland there were 149 men discharged on account of medical unfitness, giving a ratio of 22·42 per 1,000, which is lower than the previous year's rate by 3·07, but higher than the decennial average ratio by 6·21. There were 523 men discharged in Ireland, giving a ratio of 20·61 per 1,000, which is lower than the previous year's rate and that of the decennial average by 2·22 and 2·78 respectively.

The principal causes were as in previous years, diseases of the circulatory system, for which 601 men were discharged (including 331 for valvular disease and 143 for disordered action of the heart), the ratio being 4·54 per 1,000, which is below the previous year's rate by 3·26, and the average rate by ·65. Next in frequency were digestive diseases, which caused the discharge of 404 men, equal to a ratio of 3·05 per 1,000, which is lower than the previous year's rate by ·79, but higher than that of the decennial average by 1·04. Nervous diseases accounted for the discharge of 288 men, equal to a ratio of 2·18 per 1,000, which is lower than the ratio for 1902 and the decennial average rate by 1·17 and ·47 respectively. Among the cases were 125 for mental diseases, giving a ratio of ·95 per 1,000, which shows a decrease of ·45 as against the preceding year's rate, and of ·16 as compared with the decennial average ratio. Diseases of the organs of locomotion accounted for the discharge of 224 men, giving a ratio of 1·69 per 1,000, which is below the rate for the previous year and the average ratio by ·94 and ·25 respectivly. Tubercular diseases accounted for the discharge of 207 men, equal to a ratio of 1·57 per 1,000, being below the previous year's and the decennial average rates by ·51 and ·20 respectively. Of the above number 190 were discharged for tubercle of lung. Diseases of the eye caused the discharge of 185 men, equal to a ratio of 1·40 per 1,000, which, compared with the previous year's and the decennial average rates shows a decrease of ·41 in the former but an increase of ·09 in the latter. The chief causes of discharge under this head were ametropia, conjunctivitis, keratitis, and iritis.

Diseases of other organs of special sense caused the discharge of 159 men, or a ratio of 1·20 per 1,000, which is below that of the previous year and the decennial average by 1·05 and ·17 respectively. The discharges under this head were chiefly due to inflammation and perforation of membrana tympani and deafness. Debility was the cause of 146 men being discharged, equal to a ratio of 1·10 per thousand, which is 1·38 below the rate in the previous year and ·56 below the average rate. Injuries caused the discharge of 142 men (amongst whom were 6 on account of injuries received in action), the ratio, 1·08 per 1,000, being below the previous year's and the decennial average rates by 2·12 and ·79 respectively. Secondary syphilis was the cause of 117 men being discharged from the service, the ratio ·88 per 1,000 being lower than the previous year's rate by ·39 and than the average ratio by ·14. Respiratory diseases were the cause of discharge of 77 men, the ratio, ·58 per 1,000, as compared with previous year's rate, showing a decrease of ·58, and of ·42 when compared with the decennial average ratio. For rheumatism there were 68 men discharged the service as unfit, equal to a ratio of ·51 per 1,000, which is lower than the previous year's and the decennial average rates by ·97 and ·52 respectively.

United Kingdom.

In the majority of other diseases causing invaliding the variations which have occurred do not call for special remarks.

Health Statistics according to Age.

The following table has been prepared to show the influence of age on sickness, mortality, and invaliding among the troops serving in the United Kingdom during the year :—

Ages.	Average Strength	Admissions.	Deaths.	Invalided.	Ratio per 1,000 of strength.		
					Admissions.	Mortality.	Invaliding.
Under 20 years	33,779	20,306	57	619	601·1	1·69	18·32
From 20 to 25 years ..	38,999	31,831	133	1,443	816·2	3·41	37·00
„ 25 „ 30 „ ..	18,218	7,454	85	478	409·2	4·67	26·24
„ 30 „ 35 „ ..	10,328	2,743	73	153	265·6	7·07	14·81
„ 35 „ 40 „ ..	6,336	1,417	62	129	223·6	9·79	20·36
40 years and upwards ..	2,001	452	41	55	225·9	20·49	27·49
Not stated (on manœuvres)	904	689	—	11	762·2	—	12·17
Total	110,565	64,892	451	2,888	586·9	*3·41	*21·83

* Calculated on strength including men detached (132,271).

The admission rate, as in the previous year, was highest, 816·2 per 1,000, among men between 20 and 25 years of age, the next highest being 601·1 per 1,000 among men under 20 years of age, followed by 409·2 among men between 25 and 30, and 265·6 among men between 30 and 35 years. The lowest rate of admission was among men of from 35 to 40 years, which equalled 223·6 per 1·000.

The mortality rate, as in the seven preceding years, was lowest, 1·69 per 1,000, among men under 20 years of age, and showed a steady increase in each quinquennial period to 9·79 per 1,000 among men between 35 and 40 years, and then rising among men of 40 years and upwards to 20·49 per 1,000.

The highest invaliding rate occurred among men between 20 and 25 years of age, with 37·00 per 1,000, the next highest being among men of 40 years and upwards with 27·49 ; men between 25 and 30 followed with 26·24 per 1,000, and between 35 and 40 with 20·36 ; men under 20 years of age gave 18·32 per 1,000 ; men between 30 and 35 years of age giving the lowest invaliding rate, 14·81 per 1,000.

HEALTH STATISTICS ACCORDING TO LENGTH OF SERVICE.

The following table shows the influence of length of service on the various rates :— *United Kingdom.*

Service.	Average Strength.	Admissions.	Deaths.	Invalided.	Ratio per 1,000 of strength.		
					Admissions.	Mortality.	Invaliding.
Under 1 year	33,612	25,146	73	785	748·1	2·17	23·35
From 1 to 2 years ..	18,383	11,947	46	555	649·9	2·50	30·19
„ 2 „ 3 „ ..	11,583	7,413	32	364	640·0	2·76	31·43
„ 3 „ 4 „ ..	8,555	4,824	18	285	563·9	2·10	33·31
„ 4 „ 5 „ ..	7,513	3,500	21	191	465·9	2·80	25·42
„ 5 „ 10 „ ..	12,972	7,004	80	364	539·9	6·17	28·06
10 years and upwards ..	17,043	4,369	181	333	256·4	10·62	19·54
Not stated (on manœuvres)	904	689	—	11	762·2	—	12·17
Total	110,565	64,892	451	2,888	586·9	*3·41	*21·83

* Calculated on strength including men detached (132,271).

The highest admission rate, as was also the case in the previous year, was among men with less than 1 year's service with 748·1 per 1,000, and the lowest, 256·4 per 1,000, among men with 10 years' service and upwards. The sequence of ratios corresponds with that for 1902, and is lower in each instance.

As in the previous year, the ratio of mortality was highest among men with 10 years' service and upwards, with 10·62 per 1,000 ; and the lowest, 2·10 per 1,000, was among men between 3 and 4 years' service. The second highest, as was also the case in the previous year, was among men of from 5 to 10 years' service, 6·17 per 1,000.

Invaliding was highest among men with from 3 to 4 years' service with a ratio of 33·31 per 1,000, men with between 2 and 3 years' service coming next with 31·43 per 1,000. The lowest ratio was 19·54 per 1,000, and occurred among men with 10 years' service and upwards. The sequence of the ratios are the same as in the previous year, and in each case they are lower.

HEALTH STATISTICS ACCORDING TO DISTRICTS.

The admissions, deaths, invalids discharged the service, average number constantly sick, average sick time to each soldier, and average duration of each case of sickness are shown in the following table (p. 28).

It will be observed that the highest *rate of admission* occurred in the Dublin district with 745·1 per 1,000, followed by the Home, North-Eastern, Southern, Western, and Belfast districts with 691·7, 664·0, 662·3, 657·4 and

Military Districts.	Average Annual Strength.	Admissions into Hospital.	Deaths.			Invalids discharged the Service.	Average Number Constantly Sick.	Ratio per 1,000 of Strength.				Average Sick Time to each Soldier.	Average Duration of each Case of Sickness.
			With the Regiment.	Absent from the Regiment.	Total.			Admitted into Hospital.	Died.	Invalids discharged the Service.	Constantly Sick.		
												days.	days.
1. North-Eastern	5,062	3,361	17	1	18	156	163·54	664·0	3·56	30·82	32·31	11·79	17·76
2. North-Western	5,410	2,827	24	3	31	114	130·28	522·6	5·73	21·07	24·08	8·79	16·82
3. Eastern...	6,479	3,551	12	3	15	125	200·20	548·1	2·32	19·29	30·90	11·28	20·58
4. Western	6,340	4,168	33	6	39	157	270·73	657·4	6·15	24·76	42·70	15·58	23·71
5. Southern	7,307	4,842	41	1	42	229	332·20	662·3	5·75	31·34	45·47	16·59	25·04
6. Thames...	5,448	2,548	18	2	20	88	130·39	467·7	3·67	16·15	23·93	8·74	18·68
7. South-Eastern	7,409	4,483	31	3	34	196	242·50	605·1	4·59	26·45	32·73	11·95	19·74
8. Home	7,630	5,278	26	2	28	250	350·66	691·7	3·67	32·76	45·95	16·77	24·24
9. Woolwich	5,484	2,902	25	1	26	153	224·37	529·2	4·74	27·90	40·91	14·93	28·22
10. Aldershot	20,284	10,486	54	11	65	671	744·72	517·0	3·20	33·08	36·71	13·40	25·92
11. Channel Islands	1,706	744	4	—	4	13	33·50	436·1	2·34	7·62	19·64	7·17	16·43
12. Salisbury Plain	4,108	2,272	11	—	11	53	92·83	553·1	2·68	12·90	22·59	8·25	14·91
13. Scottish	5,151	2,884	33	1	34	149	149·63	559·9	6·60	28·92	29·05	10·60	18·93
14. Belfast	4,680	3,009	22	4	26	75	162·86	643·0	5·56	16·03	34·80	12·70	19·76
15. Dublin	9,130	6,803	28	5	33	169	419·87	745·1	3·61	18·51	45·99	16·79	22·53
16. Cork	8,033	4,045	23	1	24	279	222·43	503·5	2·99	34·73	27·69	10·11	20·07
Manœuvres...	904	689	1	—	1	11	24·49	762·2	1·11	12·17	27·09	9·89	12·97
Total	110,565	64,892	407	44	451	2,668	3,895·20	586·9	*3·41	*21·83	35·23	12·86	21·01
Average of 10 years, 1893 to 1902	101,948·7	69,551·4	452·2	50·1	502·3	2,811·7	4,035·85	682·2	*4·47	*25·03	39·59	14·45	21·18

* These ratios are calculated on a strength including men detached.

643·0 respectively. The lowest ratio, as was also the case in the previous year, was in the Channel Islands with 436·1 per 1,000; followed by the Thames, Cork, Aldershot, North-Western and Woolwich districts with 467·7, 503·5, 517·0, 522·6 and 529·2 respectively. In the previous year the highest rate recorded occurred in the North-Eastern district, and the lowest as stated above in the Channel Islands. Compared with previous year's rates, increase is observed in the Salisbury Plain, Channel Islands, and Woolwich districts to the extent of 113·7, 31·7 and 8·1 respectively; while decrease has occurred in the North-Eastern, Cork, Aldershot, Eastern, Western, Dublin, Southern, Home, South-Eastern, North-Western, Belfast, Thames, and Scottish districts to the extent of 298·1, 236·1, 169·2, 139·2, 131·3, 129·6, 117·8, 107·2, 101·4, 84·6, 73·1, 69·5 and 27·1 respectively. *United Kingdom.*

The highest *death rate*, 6·60 per 1,000, is shown in the Scottish district, followed by the Western, Belfast, Southern, North-Western and Woolwich districts, giving 6·15, 5·77, 5·75, 5·73 and 4·74 respectively. The lowest death rates are observed in the Eastern, Channel Islands, Salisbury Plain, Cork, Aldershot and North-Eastern districts, giving 2·32, 2·34, 2·68, 2·99, 3·20 and 3·56 per 1,000 respectively. In the previous year the highest mortality rates occurred in the Channel Islands, Southern, North-Western, Scottish, Home and Cork districts, and the lowest in the Salisbury Plain, Aldershot, Eastern, Woolwich, Western, and Thames districts. In comparison with the previous year's rates increase to the extent of ·99, ·21 and ·15 has occurred in the Western, Belfast and Scottish districts; in all other districts decrease has occurred, the most marked being the Channel Islands, Cork, Home, Eastern, Dublin and North-Eastern, with 6·62, 2·94, 2·66, 2·44, 1·94 and 1·86 per 1,000.

The *ratio of invaliding* stood highest in the Cork district, which gave 34·73 per 1,000, Aldershot coming next with 33·08 per 1,000. Other high rates were given by the Home, Southern, North-Eastern, Scottish and Woolwich districts with 32·76, 31·34, 30·82, 28·92 and 27·90. The lowest rates were 7·62, 12·90, 16·03, 16·15 and 18·51 in the Channel Islands, Salisbury Plain, Belfast, Thames and Dublin districts. Compared with the previous year, the year under review shows increase to the extent of 2·48 in the Woolwich district only, the remaining districts all showing decrease; the most notable of which, 64·71, 49·25, 41·64, and 33·03 were in the Western, North-Eastern, Belfast and Dublin districts.

The *ratio of constantly sick* was highest in the Dublin district, with 45·99 per 1,000, followed by the Home district with 45·95, and the Southern, Western, Woolwich and Aldershot districts, with 45·47, 42·70, 40·91 and 36·71 respectively. The lowest rates occurred in the Channel Islands, Salisbury Plain, Thames, North-Western and Cork districts, with 19·64, 22·59, 23·93, 24·08 and 27·69 respectively. As compared with the rates given in the previous year, the districts showing increase were, Woolwich and Channel Islands with 4·01 and ·84; in all the remaining districts, with the exception of the Scottish district the figures for which are identical with those for 1902, decrease is observed, the most notable being in the North-Eastern, South-Eastern, Aldershot, Cork and Thames districts with 14·50, 10·98, 10·77, 10·52 and 6·39 respectively.

The *average sick time to each soldier* was highest in the Dublin district with 16·79 days, the Home district coming next with 16·77 days, and the Southern, Western, Woolwich and Aldershot districts following with 16·59, 15·58, 14·93 and 13·40 respectively. The lowest sick time was 7·17 in the Channel Islands, and 8·25, 8·74 and 8·79 days in the Salisbury Plain, Thames and North-Western districts. Increase to a slight extent is shown in the Woolwich district and Channel Islands, all the other districts showing decrease.

For the *average duration of each case of sickness* the highest figures, 28·22, 25·92, 25·04, 24·24, and 23·71 days respectively, were shown by the Woolwich, Aldershot, Southern, Home and Western districts respectively; the lowest periods were 14·91, 16·43, 16·82, 17·76 and 18·68 days in the Salisbury Plain, Channel Islands, North-Western, North-Eastern and Thames districts. Compared with the figures given in the preceding year, increase is observed in all districts, with the exception of the North-Eastern district where the figures are identical with those for

United Kingdom.

1902, and the Salisbury Plain, South-Eastern, Thames, Channel Islands and Belfast districts.

Health Statistics according to Arms of the Service.

The following table (p. 31), compiled from the returns of principal medical officers, shows the admissions, deaths, number of men invalided, and number constantly sick, from each arm of the service, with the ratios per 1,000 of the strength, and the corresponding ratios for the previous ten years.

The highest rate of admission in any arm of the service was in the Foot Guards with 684·0 per 1,000, the Cavalry coming next with 675·9 per 1,000; and the lowest, in the Engineers, 369·9 per 1,000, followed by the Garrison Staff and Departments with 405·2. In the previous year the Cavalry stood highest, and the Foot Guards took the second place. The lowest ratios were, as in the year under report, in the Royal Engineers and Garrison Staff and Departments.

The mortality was again highest in Regimental Depôts, 6·12 per 1,000, Cavalry coming next with 4·45; the lowest ratio being given by the Foot Guards with 2·46, the Household Cavalry coming next with 2·99 per 1,000. In the previous year Regimental Depôts gave the highest rate and the Foot Guards took second place; the Household Cavalry were lowest, the Royal Artillery coming next.

The invaliding rate was highest in the Foot Guards with 43·01 per 1,000, Cavalry of the Line coming next with 38·87 per 1,000. The lowest rate was given in the Royal Engineers, 10·55 per 1,000, Garrison Staff and Departments following with 12·80 per 1,000. In the previous year Infantry gave the highest rate and the Foot Guards took second place, while Engineers were lowest and were followed by Regimental Depôts.

Constant inefficiency was highest in the Foot Guards with a ratio of 60·18, Cavalry of the Line coming next with 42·77; the Royal Engineers furnished the lowest rate, 18·99, Regimental Depôts coming next with 24·93 per 1,000. In 1902 the Foot Guards gave the highest rate, and Cavalry of the Line took the second place, and the lowest rates were in the Royal Engineers and Garrison Staff and Departments.

As compared with the previous year's rates, that of admission shows decrease in the Household Cavalry, Cavalry of the Line, Royal Artillery, Royal Engineers, Foot Guards, Infantry, Regimental Depôts and Garrison Staff and Departments to the extent of 77·1, 309·6, 68·7, 55·1, 281·9, 197·8, 86·8 and 71·3 respectively. The mortality shows an increase in Household Cavalry, but decrease is observed in all other arms.

In comparing the ratios of the year under report with those of the preceding ten years, increase of admission rate has occurred in Garrison Staff and Departments, in the other arms decrease is observed. In the mortality rate increase is shown in Cavalry of the Line, but in all other arms decrease is observed. In Abstract XXXIII will be found a table showing the general health of individual corps serving in the United Kingdom during the year.

Arms of the Service.	Average Strength.	Admitted into Hospital.	Died.	Discharged as Invalids.	Average Number Constantly Sick.	Annual Ratio per 1,000 of Strength.				Average of 10 Years, 1893–1902.			
						Admitted.	Died.	Invalided.	Constantly Sick.	Admitted.	Died.	Invalided.	Constantly Sick.
Household Cavalry	1,337	727	4	32	37·57	543·8	2·99	23·93	28·10	658·6	3·34	26·98	37·13
Cavalry	8,310	5,617	37	323	355·42	675·9	4·45	38·87	42·77	783·7	4·00	29·80	45·55
Royal Artillery	25,809	13,910	112	575	835·89	539·0	4·34	22·28	32·39	610·4	5·12	21·54	36·28
Royal Engineers	5,499	2,034	24	58	104·44	369·9	4·36	10·55	18·99	407·9	5·16	13·35	22·59
Foot Guards	6,906	4,724	17	297	415·62	684·0	2·46	43·01	60·18	814·2	4·95	39·89	62·12
Infantry	30,984	26,452	136	1,268	1,554·61	661·6	3·40	31·71	38·88	784·5	4·32	34·11	46·31
Regimental Depôts	12,914	7,426	79	205	321·99	575·0	6·12	15·87	24·93	618·0	6·53	18·18	27·02
Garrison Staff and Departments	9,763	3,956	36	125	261·93	405 2	3 69	12·80	26·83	397·9	5·07	16·79	26·66

MANŒUVRES.

I.—ENGLAND.

The following table shows the general health statistics (details of which are included with those of the United Kingdom), according to arms of the service, of the troops which took part in the manœuvres on Salisbury Plain from 10th September to 19th September, 1903.

Warrant Officers, Non-commissioned Officers and Men.

Arms of the Service.	Average Annual Strength.	Admitted into Hospital.	Died.	Discharged as Invalids.	Average Constantly Sick.	Ratio per 1,000. Admitted.	Died.	Invalided.	Constantly Sick.
Household Cavalry ..	—	—	—	—	—	—	—	—	—
Cavalry	48	10	—	2	1·88	208·3	—	41·67	39·16
Royal Artillery ..	126	50	—	1	3·09	396·8	—	7·94	24·53
Royal Engineers ..	40	23	—	—	1·10	575·0	—	—	27·50
Foot Guards	108	53	—	1	1·44	490·7	—	9·26	13·33
Infantry	459	527	—	7	15·45	1148·1	—	15·25	33·65
Garrison Staff and Departments ..	57	9	—	—	·38	157·9	—	—	6·66
Total	838	672	—	11	23·34	801·9	—	13·12	27·85

The principal statistics of sickness and mortality, arranged according to the various sections of disease, will be found in Abstract E.

II.—IRELAND.

The following table shows the general health statistics (details of which are included with those of the United Kingdom), according to arms of the service, of the troops which took part in the manœuvres in Ireland from 1st September to 10th September, 1903.

Warrant Officers, Non-Commissioned Officers and Men.

Arms of the Service.	Average Annual Strength.	Admitted into Hospital.	Died.	Discharged as Invalids.	Average Constantly Sick.	Ratio per 1,000. Admitted.	Died.	Invalided.	Constantly Sick.
Household Cavalry ..	—	—		—	—	—	—	—	—
Cavalry	5	1		—	·18	200·0	—	—	36·00
Royal Artillery ..	10	—		—	—	—	—	—	—
Royal Engineers ..	—	—		—	—	—	—	—	—
Foot Guards	—	—		—	—	—	—	—	—
Infantry	50	16	1	—	·97	320·0	20·00	—	19·40
Garrison Staff and Departments ..	1	—	—	—	—	—	—	—	—
Total	66	17	1	—	1·15	257·6	15·15	—	17·42

The principal statistics of sickness and mortality, arranged according to the various sections of disease, will be found in Abstract F.

OFFICERS, WOMEN AND CHILDREN.

The principal statistics of sickness and mortality amongst officers, women and children, according to the several sections of disease, are shown in Abstract D, compiled from the Annual Returns of Principal Medical Officers of Districts. *United Kingdom.*

OFFICERS.

The average strength is given as 4,545, the number of admissions 1,401, and the number of deaths 17. The ratio of admission was therefore 308·3 and the ratio of mortality 3·74 per 1,000. Compared with the returns for the previous year there is a decrease of 53·6 in the sick rate and one of 1·29 in the death rate.

GENERAL DISEASES.—*Other eruptive fevers* caused 17 admissions, equal to a ratio of 3·7 per 1,000, being lower by 3·0 than that of the preceding year. The cases comprised 6 of measles, 5 of rubella, 5 of scarlet fever, and 1 of cow-pox. A death occurred from scarlet fever. *Influenza* was the cause of 236 admissions with no death, as compared with 276 and 2 deaths in the previous year, and 233 and 1 death in 1901. As was also the case in the previous year, there was a single admission for diphtheria; the case occurred at Portsmouth. Under the heading of *enteric fever*, 5 admissions are recorded, as compared with 9 admissions and 3 deaths in the preceding year. The admission ratio equalled 1·1 per 1,000. The cases occurred as follows:—1 at Colchester, which was probably due to eating oysters at Brightlingsea; 1 at Cardiff, in which the cause could not be definitely assigned; 1 at Devonport, in which the disease was supposed to have been contracted on board ship on the voyage from South Africa; 1 at Jersey, where the drinking water was said to have been impure, and the drainage defective; and 1 at Limerick, which was believed to have been contracted away from the station.

Other continued fevers were the cause of 8 admissions, equal to a ratio of 1·8 per 1,000, which is lower by 2·1 than the ratio given in the preceding year. The admissions comprised 7 cases of *simple* continued fever and 1 of Mediterranean fever. For *dysentery* there were 9 admissions or a ratio of 2·0 per 1,000, being lower than the preceding year's rate by ·2. *Malarial fevers* were the origin of 35 admissions, giving a ratio of 7·7, which is below the previous year's rate by 6·3 per 1,000; excepting 1, a fatal case of remittent fever, all the admissions were for ague. *Septic diseases* were represented by 3 cases of erysipelas. *Tubercular diseases* caused 4 admissions, giving a ratio of 9 per 1,000, or ·3 above the previous year's ratio; three of the cases were returned as tubercle of lung. There were 12 admissions for *venereal disease* (all gonorrhœa), as compared with 2 in 1902. Under *parasitic diseases* 9 admissions were recorded as compared with *nil* in the preceding year; the cases comprised 6 of scabies, 2 of tænia solium and 1 of ringworm, and a death occurred from distomum hepaticum. Under *alcoholism* a single admission is recorded as compared with 3 admissions in the preceding year. There were 43 admissions recorded under *rheumatism*, giving a ratio of 9·5 per 1,000, which is 3·3 below that of the previous year. The admissions included 2 cases of rheumatic fever and 4 of gout. *Debility* caused 17 admissions, or a ratio of 3·7 per 1,000. *Other general diseases* gave 21 admissions and 1 death, as compared with 13 admissions and no death in 1902. The cases comprised 15 of mumps, 2 of non-malignant new growth, 2 of cyst, and 1 each of malignant new growth and anæmia; the death was due to malignant new growth of liver (sarcoma).

LOCAL DISEASES.—*Diseases of the Nervous System* were the cause of 37 admissions, equal to a ratio of 8·1 per 1,000. Eighteen of the admissions were due to neuralgia, 6 to nervous weakness, 4 to headache, and 2 to vertigo; there was also an admission for mental disease (mania).

Diseases of the Organs of Special Sense, with 20 admissions, gave a ratio of 4·4 per 1,000, as compared with 4·7 in the previous year. Of the cases 17 were for eye, 2 for aural, and 1 for nasal affections.

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Diseases of the Circulatory System caused 19 admissions with 4 deaths, being in the ratios of 4·2 and ·88 respectively, both being higher than the corresponding rates in 1902 to the extent of ·9 in the former and ·60 in the latter comparison. The deaths were due to valvular disease of heart, disordered action of heart, angina pectoris, and syncope.

Diseases of the Respiratory System caused 138 admissions and 2 deaths, equal to ratios of 30·4 and ·44 per 1,000 respectively, the former being lower by 21·5, and the latter by ·12, than the corresponding ratios in the previous year. Of the cases 107 were for bronchial affections, 12 laryngitis, 5 each for spasmodic asthma, pneumonia and pleurisy, 3 for hæmorrhage of lung, and 1 for broncho-pneumonia. The deaths were due to pneumonia and hæmorrhage of lung.

Diseases of the Digestive System caused 207 admissions and 2 deaths, the equivalent ratios being 45·6 and ·44 per 1,000, which, compared with those of the previous year, show a decrease of 8·6 in the former, but an increase of ·16 in the latter. Among the admissions there were 68 for affections of the mouth and throat, 29 for hepatic diseases, 24 for indigestion, 23 for inflammation of intestines, 21 for inflammation of stomach, 14 for diarrhœa, 10 for piles, and 6 for colic. The deaths were due to enteritis and gall stones.

Diseases of the Lymphatic System, with 14 admissions, gave a ratio of 3·1 per 1,000, as compared with 2·2 in 1902.

Diseases of the Urinary System caused 15 admissions, giving a ratio of 3·3 per 1,000. In the previous year there were 6 admissions with 1 death, the ratios being 1·7 and ·28.

Diseases of the Generative System, with 34 admissions, gave a ratio of 7·5 per 1,000, showing an increase of ·8 on the preceding year's rate. Orchitis was the cause of 23 of the admissions.

Diseases of the Organs of Locomotion gave 67 admissions, 48 being due to synovitis and 9 to myalgia, the ratio, 14·7 per 1,000, showing a decrease of 2·9 as compared with that of the previous year.

Diseases of the Connective Tissue gave a ratio of 9·7, showing a decrease of 1·2 as compared with the rate for 1902. Of the 44 admissions furnishing this ratio, 29 were due to abscess and 15 to inflammation.

Diseases of the Skin, with 35 admissions, or a ratio of 7·7 per 1,000, shows a decrease of 1·5 as compared with the previous year's rate. The chief causes of admission were: eczema 12 cases, boil 11, ulcer 4, and carbuncle 3 cases.

INJURIES were 348 in number, equal to a ratio of 76·5 per 1,000, which shows an increase of 17·8 on the previous year's rate. Under *general injuries* there were 2 admissions, 1 from shock and 1 from burns and scalds (fatal), caused by injuries sustained in an explosion at the Royal Arsenal, Woolwich. Among *local injuries* the chief causes of admission were: contusions 109 cases, sprains 103, wounds 63, fractures 37, concussion of brain 12, dislocation 7, and wounds from gunshot 5. Three deaths occurred, 2 from gunshot wounds, self inflicted, and 1 from fracture.

POISONS.—A death occurred under this head from poisoning by oxalic acid, self administered. The verdict given at Coroner's inquest was "suicide whilst of unsound mind."

WOMEN.

The annual returns give the average strength of women borne on the strength of the army in the United Kingdom as 12,433. The number of cases of sickness, exclusive of uncomplicated cases of parturition, was 5,555, and the number of deaths 48. The ratio of cases of sickness to strength was 446·8 per 1,000, and that of mortality 3·86, which, compared with the corresponding ratios for the previous year show decrease to the extent of 93·6 in the former and ·02 in the latter.

GENERAL DISEASES.—A single case of *small-pox* occurred at Wrexham in the wife of the hospital sergeant, the source of contagion was doubtful but some suspicion was attached to a case (a militiaman) which was diagnosed as chicken-pox with which her husband was in occasional contact. She was removed to the small-pox hospital and made a good recovery. The admissions for *other eruptive fevers* were 16 in number, equal to a ratio of 1·3 per 1,000. The cases comprised 8 of measles, 5 of scarlet fever, and

1 each of rubella, cow-pox and chicken-pox. *Influenza* was the cause of 337 admissions as compared with 477 in the preceding year. The ratio per 1,000 equalled 27·1 or below that given in 1902 by 18·1. There were 8 cases of *diphtheria* as compared with 6 in the previous year. The cases occurred as follows:—3 at Aldershot, and 1 each at Great Yarmouth, Bristol, Taunton, Brighton, and Dublin. *Enteric fever* caused 7 admissions, giving a ratio of ·6 per 1,000, and showing an increase of ·2 on the preceding year's rate. There was no death. The cases were distributed as follows:—1 at Dorchester in which the woman contracted the disease from one of her children, 1 at Aldershot which was probably contracted while staying at Chester, and 1 each at Parkhurst, Winchester, Warrington, Edinburgh Castle and Fethard, in none of which could the source of the disease be definitely ascertained. *United Kingdom.*

Other continued fevers caused 3 admissions, equal to a ratio of ·2 per 1,000, which is exactly similar to the previous year's rate. Two of the admissions are shown as Mediterranean fever and the third is returned as simple continued fever. The admissions for *dysentery* numbered 5, giving a ratio of ·4 per 1,000 as compared with ·5 per 1,000 the ratio in 1902. For *malarial fevers* there were 69 admissions with 1 death, the ratios per 1,000 being 5·6 and ·08 respectively as compared with 4·4 and *nil* in the preceding year. Two were cases of remittent fever, and the remainder with the death were due to ague. *Septic diseases* caused 16 admissions with 3 deaths, the equivalent ratios being 1·3 and ·24 per 1,000, showing a decline, as compared with the ratios for 1902, of ·3 and ·04 respectively. Thirteen of the admissions and all of the deaths were due to septicæmia, and the remaining 3 admissions were for erysipelas. *Tubercular diseases* furnished 65 admissions and 5 deaths, giving ratios of 5·2 and ·40 per 1,000 respectively, the former showing an increase of 1·6 and the latter a decrease of ·17 as compared with the corresponding ratios given in the preceding year. Forty-six of the admissions and all the deaths were caused by tubercle of lung. There were 9 admissions recorded under *secondary syphilis*, in the previous year 18 cases were returned under this head; for *parasitic diseases*, 6 admissions are shown as compared with 7 in the preceding year. *Alcoholism* caused 6 admissions as compared with 4 in 1902. *Rheumatism* was the cause of 225 admissions and 2 deaths, equal to ratios of 18·1 and ·16 per 1,000 respectively, as compared with 27·2 and *nil* in the preceding year. The cases comprised 203 of rheumatism, 11 of rheumatic fever, and 11 of gout. One of the deaths was due to rheumatic fever and 1 to rheumatism. Under *debility*, 1,164 cases are returned equal to a ratio 93·6 per 1,000, which is higher by 2·9 than the previous year's ratio. Among 199 admissions for *other general diseases* there were 158 cases of anæmia, 14 of non-malignant new growth, 4 of malignant new growth, 8 of mumps, and 4 of chlorosis. Five deaths were recorded, viz.: 2 from malignant new growth, and 1 each from non-malignant new growth, anæmia, and cyst.

Local Diseases.—*Diseases of the Nervous System.*—The number of admissions recorded under this head was 308, with 8 deaths, giving ratios of 24·8 and ·64 per 1,000 respectively, both being above the corresponding ratios in the preceding year by 5·3 and ·35 respectively. The principal causes of sickness were neuralgia 204 cases, hysteria 28, epilepsy 19, headache and megrim 16, and nervous weakness 13. There were also 2 admissions each for mania, dementia and delusional insanity, and 1 for melancholia. The deaths were due to apoplexy and eclampsia 2 cases each, and 1 each to degeneration of spinal cord, paralysis, epilepsy, and mania.

Diseases of the Eye with 64 admissions gave an admission ratio of 5·1 per 1,000, which is higher by 2·2 than the previous year's rate. Among the admissions were 44 of conjunctivitis, 5 of iritis, 3 each of stye and keratitis, and 2 of blepharitis.

Diseases of other Organs of Special Sense gave 28 admissions, 10 of which were aural, and 18 nasal affections. The ratio per 1,000 was 2·3.

Diseases of the Circulatory System.—There were 143 admissions under this head with 9 deaths, giving ratios of 11·5 and ·72 per 1,000 respectively; which compared with the corresponding ratios in the previous year show a decrease of ·9 in the rate of admission, but an increase of ·44 in the mortality

rate. The principal causes of admission were varicose veins 68, valvular disease of the heart 35, functional action of heart 16, and phlebitis 12. The deaths are returned as valvular disease of the heart 7, and embolism and aneurism 1 each.

Diseases of the Respiratory System were the cause of 786 admissions and 7 deaths, the equivalent rates being 33·2 and ·36 per 1,000. Compared with similar rates in the previous year, a decline of 69·3 in the former and ·48 in the latter is observed. Bronchial affections caused 633 of the admissions, pleurisy 47, laryngitis 34, pneumonia 30, spasmodic asthma 19, and phthisis 17. Of the deaths 3 were due to pneumonia, 2 to pleurisy, and 1 each to phthisis and congestion of lung.

Diseases of the Digestive System with 1,032 admissions and 2 deaths gave rates of 53·7 and ·24 per 1,000 respectively, as compared with 101·7 and ·47 in the preceding year. Out of the total admissions under this head, 335 are shown as indigestion, 323 as affections of the mouth and throat, 102 as inflammation and ulceration of stomach and 78 as diarrhœa. The causes of death were enteritis and ulceration of stomach 1 case each.

Diseases of the Lymphatic System furnished 30 admissions, equal to a ratio of 2·4 per 1,000, which shows an increase of ·9 on the preceding year's rate. Among the admissions, 5 cases of goitre, with 1 death, are returned.

Diseases of the Urinary System caused 51 admissions and 2 deaths, equal to ratios of 4·1 and ·16, which are above the corresponding ratios for the previous year by 2·4 and ·08 respectively. The deaths were due to acute nephritis and Bright's disease.

Diseases of the Generative System were the cause of 534 admissions and 2 deaths, equal to ratios of 43·0 and ·16 per 1,000, that of admission being 6% higher, and that of mortality 22 lower than the corresponding ratios in 1902. Among the admissions were 154 for functional disorders, 123 for affections connected with pregnancy, 95 uterine disorders, 65 affections connected with parturition, 45 affections of the breast, and 16 affections of the ovaries. The fatal cases were 1 each from miscarriage and hæmorrhage from placenta.

Diseases of the Organs of Locomotion gave an admission ratio of 4·5 per 1,000, or an increase on the preceding year's rate of ·6; *diseases of the connective tissue* with an admission ratio of 9·8 per 1,000, shows a slight decrease (·4) as compared with the ratio for 1902, and *diseases of the skin* with an admission ratio of 11·9 also shows a decline (·3) in comparison with that of the previous year.

INJURIES.—115 admissions and 1 death are recorded under this head, the equivalent ratios being 9·3 and ·08 per 1,000, as compared with 5·5 and *nil* in the preceding year. There were 2 cases of *general injury*, with 1 death, due to burns and scalds; the majority of the local injuries were cases of wounds, sprains, and contusions.

POISONS.—Under this head 2 admissions for vegetable poisoning are recorded.

CHILDREN.

The average strength of children borne on the strength of the army in the United Kingdom was 23,277. The attacks of illness numbered 12,111, and the deaths 302, giving a sick rate of 520·3 and a death rate of 12·97 per 1,000. Compared with the corresponding ratios in the previous year, a decrease of 126·7 is shown in the sick rate, and of 1·92 in the death rate.

GENERAL DISEASES.—A single case of *small-pox* occurred, which took place at Wrexham; the child contracted the disease from her mother, whose admission has already been referred to. *Other eruptive fevers* caused 1,588 admissions and 18 deaths, the corresponding ratios being 68·2 and ·77 per 1,000, which are below those of the previous year by 58·1 and ·10 respectively. There were 1,016 cases of measles (including rubella) with 13 deaths. The stations at which the highest number of admissions occurred were Aldershot 98, Colchester 69, Portsmouth (including Hilsea and

Gosport) 66, Dublin 65, Dover 64, London 47, Curragh 43, York 40, Devonport 38, Warrington 37, and Taunton 35. Scarlet fever gave 244 admissions with 5 deaths; Portsmouth (including Hilsea and Gosport) furnished 28 cases, Dublin 21, Curragh 19, Cork 14, Woolwich 13, and Devonport 10. The remaining cases of eruptive fevers were 288 of chicken-pox and 40 of cow-pox. *Influenza* caused 262 admissions and 3 deaths, as compared with 546 admissions and 1 death in 1902. There were 77 admissions for *diphtheria* with 7 deaths, equal to ratios of 3·3 and ·30 per 1,000, being lower than those of the preceding year by 1·6 and ·82 respectively. Twelve cases with 1 death occurred at Colchester, 8 with 1 death at Aldershot, 5 cases at Portsmouth, 5 at Great Yarmouth, 4 at Taunton, 3 with 1 death at Dover, 3 with 1 death at Canterbury; 1 death each also occurred in London (St. John's Wood), Dundalk, and Newbridge. *Enteric fever* caused 13 admissions with 2 deaths, the ratios per 1,000 being ·6 and ·09 as compared with ·7 and ·05 in the previous year. At Dorchester 3 children from one family were admitted; the eldest boy, who was said to have been in the habit of visiting Weymouth and other places adjoining, was first attacked with the disease, and the other members of the family, including the mother, became infected; 3 cases with 1 death occurred at Aldershot, two of which occurred in one family, one of these was contracted out of the district and may have been due to drinking impure water, and from this case the other was probably contracted; the remaining case had recently arrived from the Curragh, from whence the infection was probably carried; 2 admissions at Chatham, one of which occurred in lodgings where the surroundings were of a very insanitary character, in the other no cause could be traced; from Oxford 2 admissions were reported, one of these, which terminated fatally, occurred at High Wycombe, and was attributed to defective drainage; regarding the other, no information has been given. Single admissions also occurred at Devonport, Parkhurst (I. of W.), and Curragh. *United Kingdom.*

Other Continued Fevers.—There were 38 admissions recorded under this head, giving a ratio of 1·6 per 1,000 and differing only fractionally from the previous year's rate. The cases were 37 of simple continued fever and 1 of Mediterranean fever. There were 6 admissions with 1 death for *dysentery*, as compared with 8 admissions and no death in 1902. *Malarial fevers* accounted for 50 admissions, equal to a ratio of 2·2, which is practically the same as in the previous year. Of the cases, 47 were for ague and 3 for remittent fever. For *septic diseases* there were 9 admissions, equal to a ratio of ·4 per 1,000, which is fractionally lower than that of the foregoing year; 8 of the cases were due to erysipelas and 1 to pyæmia. *Tubercular diseases* caused 55 admissions and 12 deaths, equal to ratios of 2·4 and ·52 respectively, which, compared with the preceding year's ratios, show an increase of ·3 in the admission and a decrease of ·04 in the death rate. Twenty-nine of the admissions and 5 of the deaths were due to tubercle of lung. Under *venereal diseases* 8 admissions are recorded for congenital syphilis. *Parasitic diseases* were the cause of 218 admissions, equal to a ratio of 9·4 per 1,000, which is 1·7 below the ratio for 1902. Ring-worm and scabies were the principal causes of admission. Under the head of *rheumatism* 64 admissions are recorded, 59 being for rheumatism and 5 for rheumatic fever. *Debility* caused 841 admissions and 37 deaths, equal to ratios of 36·1 and 1·59 per 1,000 respectively, as compared with 36·8 and ·87 in the preceding year. *Other general diseases*, with 825 admissions and 12 deaths gave ratios of 35·4 and ·52 respectively, as compared with 29·3 and 1·53 per 1,000 in 1902; included in the above were whooping-cough 381 cases, mumps 328, anæmia 53, rickets 31, non-malignant new growth 11, congenital malformation 8, and various other ailments 13. The deaths were due to whooping-cough 6, congenital malformation 4, rickets 1, and leucocythemia 1.

Local Diseases.—*Diseases of the Nervous System.*—The admissions under this head numbered 206 with 37 deaths, equal to ratios of 8·8 and 1·59 respectively, the former being lower by 1·9, and the latter higher by ·10 than the ratios of the preceding year. The principal causes of sickness were: eclampsia, for which which there were 72 admissions and 22 deaths, neuralgia 31 admissions, chorea 24, headache and megrim 17, laryngismus stridulus 16 with 5 deaths, inflammation of brain and its membranes 16 admissions

United Kingdom.

and 9 deaths, and epilepsy 13 admissions. There was also 1 admission for idiocy. In addition to the deaths above mentioned was one for paralysis.

Diseases of the Eye caused 215 admissions, principally cases of conjunctivitis.

Diseases of Other Organs of Special Sense, with 166 admissions, giving a ratio of 7·1 per 1,000, being higher by 2·3 than the rate given in the previous year. Of the number admitted 95 cases were for aural, and 71 for nasal, affections.

Diseases of the Circulatory System caused 23 admissions and 6 deaths, equal to ratios of 1·0 and ·26 per 1,000 as compared with 1·9 and ·10 in 1902. Of the admissions 10 were due to valvular disease, and 6 to disordered action of the heart. The causes of death were 4 valvular disease of heart, and 1 each from endocarditis and syncope.

Diseases of the Respiratory System gave 3,519 admissions and 102 deaths, or ratios per 1,000 of 151·2 and 4·38 respectively ; the former shows a decline of 48·2, and the latter one of ·79, as compared with the corresponding ratios for 1902. Bronchial affections were the cause of 3,204 of the admissions, and pneumonia gave 188. The deaths were 55 for bronchial affections, 39 for pneumonia, 4 for broncho-pneumonia, 2 congestion of lungs, and 1 each for laryngitis and pleurisy.

Diseases of the Digestive System.—Under this head are shown 2,371 admissions and 48 deaths, giving ratios of 101·9 and 2·06 per 1,000 respectively, which show decrease as compared with the corresponding ratio in the previous year to the extent of 10·3 and ·14 respectively. The principal causes of sickness were affections of the mouth and throat 1,027 cases, diarrhœa 470, indigestion 228, inflammation of stomach 186, inflammation of intestines 133, and disorders of dentition 133. The causes of death were diarrhœa 19, enteritis 17, disorders of dentition 4, gastritis 3, and sore throat, tonsillitis, colic, inflammation of liver and intussusception 1 case each.

Diseases of the Lymphatic System accounted for 90 admissions, 85 of which were for inflammation, and 4 for hypertrophy of lymph glands, and there was a single admission for goître. The ratio, 3·9 per 1,000, compared with that of the previous year, shows an increase of 1·2.

Diseases of the Urinary System caused 15 admissions and 1 death. Six of the admissions were for incontinence of urine, 3 for cystitis, and 1 for retention of urine. The death was due to acute nephritis.

Diseases of the Generative System were the origin of 60 admissions, giving a ratio of 2·6 per 1,000.

Diseases of the Organs of Locomotion accounted for 45 admissions, equal to a ratio of 1·9 per 1,000, and *Diseases of the Connective Tissue*, with 192 admissions, gave a ratio of 8·3 per 1,000. There were 110 admissions for abscess and 80 for inflammation of connective tissue. There was 1 death due to abscess.

Diseases of the Skin caused 559 admissions and 5 deaths, being in the ratios of 24·0 and ·21 per 1,000 respectively. The admission rate is lower by 1·9, but the mortality ratio is higher by ·16 than the corresponding ratios in the previous year. The most frequent ailments were eczema, impetigo, urticuria, boil, and ulcer. The causes of death were : eczema 3, pemphigus 1, and pityriasis rubra 1.

INJURIES were 590 in number, equal to a ratio of 25·3 per 1,000, being higher by 4·2 as compared with the ratio for the previous year. The principal causes of admission were wounds 242, contusions 101, burns and scalds 69, fractures 61, sprains 60, and abrasions 35. There were 9 deaths, 6 being due to burns and scalds, 2 to suffocation by plugging of the air passages, and 1 to suffocation by over-laying.

VACCINATION.

In the accompanying table will be found the conditions as to vaccination of all recruits found fit for the service during the year, together with the proportion per 1,000 of each condition :— *United Kingdom.*

1903.	Number of Recruits found on Inspection fit for the Service.	Proportion per 1,000.
Had marks of vaccination	45,077	955·6
Had marks of small-pox	92	2·0
Had neither marks of vaccination nor of small-pox	2,002	42·4
Total	47,171	1000·0

As compared with the results in the preceding year, a decrease of 2·5 per 1,000 is observed amongst recruits bearing marks of vaccination, a decrease of ·6 amongst those bearing marks of small-pox, and an increase of 3·1 amongst those bearing neither marks of vaccination nor of small-pox.

The following tables (p. 40), compiled from the annual returns of principal medical officers, show the number of vaccinations performed during the year, with the proportions per 1,000 of successful or modified results or failures, amongst individuals vaccinated with lymph from the Army Vaccine Institute, Aldershot, or with lymph from other sources.

The primary vaccinations and re-vaccinations during the year, as shown in these tables, give a total of 45,075 operations among all classes of soldiers. This number is less than the number of vaccinations in the preceding year by 30,971. The number of vaccinations among recruits was 40,157, a decrease of 16,978, and the number among soldiers, other than recruits, 4,918, being a decrease of 13,993. The number of recruits found on inspection fit for service during the year was 47,171, and as the number vaccinated was 40,157, as recorded by the returns furnished to the War Office, there are 7,014 not accounted for in the vaccination tables. This is explained by the fact that recruits who joined from the militia had been satisfactorily vaccinated while in that force, while others enlisted so late in the year that the results of their vaccination do not appear in the returns; in some instances, recruits have deserted before vaccination could be carried out.

Amongst all classes of soldiers, as shown in Table III, primary vaccinations, compared with the corresponding results in 1902, show an increase of 80·3 per 1,000 in perfect results, but decreases of 31·9 and 48·4 in the proportions of modified results and failures respectively. As regards re-vaccinations there was an increase in the proportion of perfect results of 34·1 per 1,000, but decreases in the proportions of modified results and failures to the extent of 21·8 and 12·3 respectively.

WOMEN.—There were 23 primary vaccinations among the women, all giving perfect results; and 485 cases of re-vaccination, of which 365 or 752·6 per 1,000, were perfect results, 90, or 185·6, modified results, and 30, or 61·8 per 1,000, were failures. Compared with the previous year there is an increase of 245·0 in the proportion of perfect results, but decreases of 148·0 and 97·0 per 1,000 respectively have occurred in the proportion of modified results and failures.

CHILDREN.—The number of primary vaccinations among the children was 2,996, of which 2,824 were perfect, and the remainder failures, equal to 942·6 and 57·4 per 1,000 respectively. Compared with the results for previous year there is an increase of perfect results to the extent of 132·4, and a corresponding decrease in the proportion of failures. In 381 cases of re-vaccination there were 317 perfect results, and 64 failures, giving ratios of 832·0 and 168·0 per 1,000 respectively, which compared with corresponding ratios in the previous year show increase to the extent of 47·5 in perfect results, and a corresponding decrease in the proportion of failures.

1902, and the Salisbury Plain, South-Eastern, Thames, Channel Islands and Belfast Districts.

Health Statistics according to Arms of the Service.

The following table (p. 31), compiled from the returns of principal medical officers, shows the admissions, deaths, number of men invalided, and number constantly sick, from each arm of the service, with the ratios per 1,000 of the strength, and the corresponding ratios for the previous ten years.

The highest rate of admission in any arm of the service was in the Foot Guards with 685·0 per 1,000, the Cavalry coming next with 675·9 per 1,000; and the lowest, in the Engineers, 369·9 per 1,000, followed by the Garrison Staff and Departments with 440·2. In the previous year the Cavalry stood highest, and the Foot Guards took the second place. The lowest ratios were, as in the year under report, in the Royal Engineers and Garrison Staff and Departments.

The mortality was again highest in Regimental Depôts, 6·12 per 1,000, Cavalry coming next with 4·43, the lowest ratio being given by the Foot Guards with 1·46, the Household Cavalry coming next with 2·99 per 1,000. In the previous year Regimental Depôts gave the highest rate and the Foot Guards took second place. The Household Cavalry were lowest, the Royal Artillery coming next.

The invaliding rate was highest in the Foot Guards with 43·01 per 1,000, Cavalry of the Line coming next with 38·87 per 1,000. The lowest rate was given in the Royal Engineers, 10·33 per 1,000, Garrison Staff and Departments following with 13·80 per 1,000. In the previous year Infantry gave the highest rate and the Foot Guards took second place, while Engineers were lowest and were followed by Regimental Depôts.

Constant inefficiency was highest in the Foot Guards with a ratio of 49·18, Cavalry of the Line coming next with 45·77; the Royal Engineers furnished the lowest rate, 18·99, Regimental Depôts coming next with 21·44 per 1,000. In 1902 the Foot Guards gave the highest rate, and Cavalry of the Line took the second place, and the lowest rates were in the Royal Engineers and Garrison Staff and Departments.

As compared with the previous year's rates, that of admission shows decrease in the Household Cavalry, Cavalry of the Line, Royal Artillery, Royal Engineers, Foot Guards, Infantry, Regimental Depôts and Garrison Staff and Departments to the extent of 77·1, 30·6, 68·7, 55·1, 28·9, 19·8, 30·8 and 7·4 respectively. The mortality shows an increase in Household Cavalry, but decrease is observed in all other arms.

In comparing the ratios of the year under report with those of the preceding ten years, increase of admission rate has occurred in Garrison Staff and Departments, in the other arms decrease is observed. In the mortality rate increase is shown in Cavalry of the Line, but in all other arms decrease is observed. In Abstract XXXIII will be found a table showing the general health of individual corps serving in the United Kingdom during the year.

Arms of the Service.	Average Strength.	Admitted into Hospital.	Died.	Discharged as Invalids.	Average Number Constantly Sick.	Annual Ratio per 1,000 of Strength.				Average of 10 Years, 1893–1902.			
						Admitted.	Died.	Invalided.	Constantly Sick.	Admitted.	Died	Invalided	Constantly Sick.
Household Cavalry	1,337	727	4	32	37·57	543·8	2·99	23·93	28·10	658·6	3·34	26·08	37·13
Cavalry	8,310	5,617	37	323	355·42	675·9	4·45	38·87	42·77	783·7	4·00	29·30	15·55
Royal Artillery	25,800	13,910	112	575	835·89	539·0	4·34	22·28	32·39	610·4	5·12	21·74	20·
Royal Engineers	5,400	2,034	24	58	104·44	369·9	4·36	10·55	18·99	407·9	5·10		
Foot Guards	6,906	4,724	17	207	415·62	684·0	2·46	13·01	60·18	814·9			
.. .. ..	30,984	26,452	136	1,268	1,554·61	661·6	3·40	31·71					
Depôts	12,014	7,426	79	205	321·99								
ff and Depart.	9,763	3,956	36	195									

REPOR

United Kingdom.

increased by 4·41, that of recruits born in Scotland by 56·85, that of recruits born in Ireland by 24·69, and that of those born in the Colonies or Foreign Countries by 4·38 per 1,000.

The proportion per 1,000 recruits furnished by England and Wales and Ireland has increased by 2 and 7 respectively; but the proportion for Scotland has decreased by 9, while that for the Colonies is identical with the number furnished in 1902.

In Table III are shown the occupations of recruits previous to enlistment, the ratio rejected per 1,000 of each group of occupations, and the proportion of each group in every 1,000 men inspected :—

TABLE III.

Occupations of Recruits.	Number Inspected.	Number Rejected.	Ratio Rejected per 1,000 Inspected.	Proportion of each Group in 1,000 Recruits Inspected.
1. Labourers, Servants, Husbandmen, &c.	47,208	16,522	349·98	679
2. Manufacturing Artisans (Clothworkers, Weavers, Lace Makers, &c.)	7,919	2,650	334·64	114
3. Mechanics employed in Occupations favourable to physical development (Smiths, Carpenters, Masons, &c.) ..	7,785	2,516	323·19	112
4. Shopmen and clerks	3,396	1,123	331·66	49
5. Professional Occupations, Students, &c.	499	118	236·47	7
6. Boys under 17 years of age	2,756	475	172·35	39
Total	69,553	23,404	336·49	1,000

Compared with the previous year there is an increase of 20·29 per 1,000 in the ratio of rejections of Class I (labourers, &c.), of 10·01 in Class III (mechanics, &c.), of 3·06 in Class IV (shopmen and clerks), and of 34·30 in Class VI (boys under seventeen years of age), while in Class II (manufacturing artisans) there is a decrease of 25·00, and of 58·09 in Class V (professional occupations).

The proportions of the different classes of occupations, as compared with the previous year, show an increase of 10 per 1,000 recruits inspected in Class I (labourers, &c.), and a similar number in Class VI (boys under seventeen years of age), but a decrease of 3 in Class II (manufacturing artisans), of 5 in Class III (mechanics, &c.), of 10 in Class IV (shopmen and clerks), and of 2 in Class V (professional occupations).

The following table gives the number of recruits rejected on inspection during the year according to the different causes of rejection, arranged in classes, and the ratio per 1,000 of rejection in each class, the same information being also given regarding recruits unfit within three months of enlistment :—

TABLE IV.

United Kingdom.

Causes of Rejections in Classes.	Total Inspected, 69,553.			
	Number Rejected on Inspection.	Ratio per 1,000 Rejected on Inspection.	Unfit within Three Months of Enlistment.	Ratio per 1,000 Rejected as Unfit within Three Months of Enlistment.
1. Syphilis	194	2·79	17	·24
2. Tubercle	108	1·55	14	·20
3. Impaired Constitution and Debility	225	3·24	44	·63
4. Other General Diseases	389	5·59	60	·86
5. Diseases of Nervous System	70	1·01	25	·36
6. Weakness of Intellect	131	1·88	62	·89
7. Defective Vision	2,535	36·45	38	·54
8. Diseases of Eyes and Eyelids	113	1·61	21	·30
9. Diseases of Nose and Mouth	28	·40	3	·04
10. Disease of Ears	100	1·44	37	·53
11. Deafness	137	1·97	12	·17
12. Impediment of Speech	94	1·35	3	·04
13. Disease of Heart	1,312	18·86	115	1·65
14. Disease of Arteries (Aneurysm)	14	·20	1	·01
15. Disease of Veins (Varix)	807	11·60	30	·43
16. Disease of Lungs (except Tubercle)	171	2·46	—	—
17. Loss or Decay of many Teeth	4,400	63·26	192	2·76
18. Hernia	566	8·14	32	·46
19. Laxity of Abdominal Rings	98	1·41	1	·01
20. Hæmorrhoids	43	·62	—	—
21. Diseases of the Urinary Organs	49	·71	26	·37
22. Varicocele	908	13·06	26	·37
23. Other Diseases of the Genital Organs (not Syphilitic).	163	2·34	6	·08
24. Defects of Upper Extremities, from Fracture, Contraction, Luxation, &c.	301	4·33	14	·20
25. Defects of Lower Extremities, from Fracture, Contraction, Luxation, &c.	1,088	15·64	93	1·34
26. Flat Feet	1,102	15·84	65	·93
27. Diseases of Joints	164	2·36	10	·14
28. Other Affections of Bones and Muscles.	162	2·33	19	·27
29. Ulcers, Wounds, and Cicatrices	119	1·71	6	·08
30. Other Affections of the Cutaneous System.	394	5·67	11	·16
31. Malformation of Ears	5	·07	—	—
32. Malformation of Nose and Mouth	12	·17	—	—
33. Malformation of Chest and Spine	343	4·93	19	·27
34. Malformation of Urinary or Genital Organs.	63	·91	1	·04
35. Under Height	886	12·74	—	—
36. Under Chest Measurement	3,684	52·97	8	·11
37. Under Weight	1,007	14·48	1	·04
38. Apparent Age not in accordance with Regulations.	220	3·16	1	·04
39. Not likely to become efficient	173	2·49	9	·13
40. Over Height	4	·06	—	—
Total rejected	22,382	321·80	1,022	14·69

Med system.

The largest number of rejections on inspection was caused by defective development (under height, weight, and chest measurement), the ratios of rejections under the headings 35, 36, and 37 being 80·19. This is a decrease of 9·84 as compared with the corresponding ratio for the previous year.

Deficient chest measurement gives the highest ratio amongst these developmental causes of rejection, namely, 52·97 per 1,000, which is lower than the corresponding ratio in 1902 by 3·75. The ratio of rejection for deficient weight has decreased by 7·24, while that for under height has increased by 1·15.

Among other causes of rejection, loss or decay of many teeth was the most frequent, the ratio being 63·26 per 1,000, which is higher by 14·00 than in 1902. The next most frequent causes of rejection were defective vision, 26·45 per 1,000; disease of heart, 18·86 per 1,000; flat feet, 15·84 per 1,000; defects of lower extremities, 15·64 per 1,000; varicocele, 13·06 per 1,000; disease of veins, 11·60 per 1,000; and hernia, 8·14 per 1,000. In the previous year these conditions were also the more frequent causes of rejection, but the order of their frequency and the ratios themselves vary.

Among the recruits found unfit within three months of enlistment, the most frequent causes of rejection were loss or decay of many teeth (192 cases), disease of heart (115), defects of lower extremities (95), flat feet (65), and weakness of intellect (62).

Ages, Heights, Weights, and Chest Measurements of all Recruits finally approved for Service during the Year.

In the following table are shown the ages of all recruits finally approved for service, and the proportion of each age per 10,000:—

TABLE V.

Ages.	Numbers finally approved for Service.	Proportion per 10,000.
Boys under 17 years	2,279	494
From 17 to 18 „	606	131
„ 18 to 19 „	19,637	4,255
„ 19 to 20 „	8,339	1,807
„ 20 to 21 „	4,699	1,018
„ 21 to 22 „	3,176	688
„ 22 to 23 „	2,289	496
„ 23 to 24 „	1,827	396
„ 24 to 25 „	1,601	347
25 years and upwards	1,696	368
Total	46,149	10,000

It will be seen from the above table that recruits between 18 and 19 years of age give the greatest number of those passed fit for the service, the proportion per 10,000 at that age being 4,255. In the preceding year the proportion was 4,065 for this age. The next in order was between 19 and 20 years being, in the proportion of 1,807 per 10,000. In the previous year the proportion was 1,832 for this age. The remaining ages show a similar

sequence in the proportion of recruits finally approved, with the exception of boys under 17, which gives a proportion per 10,000 of 494, and recruits of 25 years and upwards who give a proportion of 368 per 10,000, being an increase of 130 and a decrease of 140 respectively. *United Kingdom.*

The next table gives the heights of recruits finally approved, and the proportion of each height per 10,000. It also gives the heights of recruits finally approved arranged in series according to age, together with the proportion per 10,000 of each height at each age.

TABLE VI.

Heights of Recruits finally approved for Service.	Boys under 17 years.	Between 17 and 18.	Between 18 and 19.	Between 19 and 20.	Between 20 and 21.	Between 21 and 22.	Between 22 and 23.	Between 23 and 24.	Between 24 and 25.	25 years and upwards.	Total at each Height.
ft. in. ft. in.											
Under 5 3 ...	1,853	136	807	207	134	67	47	27	30	30	3,338
5 3 to 5 4 ...	171	164	3,941	1,198	574	374	264	178	140	90	7,034
5 4 to 5 5 ...	103	111	4,266	1,500	772	496	316	263	234	203	8,264
5 5 to 5 6 ...	73	69	3,429	1,463	727	537	359	293	242	292	7,484
5 6 to 5 7 ...	34	50	2,801	1,355	775	499	390	305	270	320	6,799
5 7 to 5 8 ...	23	37	2,149	1,156	660	472	348	316	249	279	5,689
5 8 to 5 9 ...	14	18	1,165	718	489	336	257	182	180	208	3,567
5 9 to 5 10 ...	5	14	569	375	287	193	195	127	125	142	2,032
5 10 to 5 11 ...	1	4	311	195	143	110	81	75	76	70	1,066
5 11 to 6 0 ...	—	2	139	104	85	52	50	39	32	42	554
6 0 and upwards	2	1	60	68	53	40	33	22	23	20	322
Total at each age	2,279	606	19,637	8,339	4,699	3,176	2,289	1,827	1,601	1,696	46,149

Heights of Recruits finally approved for Service.	Proportions per 10,000 at each Age.										Total Proportion of each Height per 10,000.
	Boys under 17 years.	Between 17 and 18.	Between 18 and 19.	Between 19 and 20.	Between 20 and 21.	Between 21 and 22.	Between 22 and 23.	Between 23 and 24.	Between 24 and 25.	25 Years and upwards.	
ft. in. ft. in.											
Under 5 3 ...	8,131	2,244	411	248	285	211	205	148	187	177	723
5 3 to 5 4 ...	750	2,706	2,007	1,437	1,222	1,177	891	974	874	531	1,524
5 4 to 5 5 ...	452	1,832	2,173	1,799	1,643	1,562	1,381	1,440	1,462	1,197	1,791
5 5 to 5 6 ...	320	1,139	1,746	1,754	1,547	1,691	1,568	1,604	1,512	1,722	1,622
5 6 to 5 7 ...	149	825	1,426	1,625	1,649	1,571	1,704	1,669	1,686	1,887	1,473
5 7 to 5 8 ...	101	611	1,094	1,386	1,404	1,486	1,520	1,730	1,555	1,645	1,233
5 8 to 5 9 ...	62	297	593	861	1,041	1,058	1,123	996	1,124	1,226	773
5 9 to 5 10 ...	22	231	290	450	611	608	852	695	781	837	440
5 10 to 5 11 ...	4	66	158	234	304	346	354	411	475	413	231
5 11 to 6 0 ...	—	33	71	125	181	164	258	213	200	247	120
6 0 and upwards ...	9	16	31	81	113	126	144	120	144	118	70
Total ...	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000

United Kingdom.

Compared with a similar return for the previous year, the proportion of recruits between 5 feet 3 inches and 5 feet 4 inches has increased by 90, between 5 feet 4 inches and 5 feet 5 inches by 64, between 5 feet 6 inches and 5 feet 7 inches by 71, between 5 feet 7 inches and 5 feet 8 inches by 128, between 5 feet 8 inches and 5 feet 9 inches by 103, between 5 feet 9 inches and 5 feet 10 inches by 31, between 5 feet 10 inches and 5 feet 11 inches by 35, between 5 feet 11 inches and 6 feet by 24, and over 6 feet by 15; while the proportion of recruits under 5 feet 3 inches has decreased by 532, and between 5 feet 5 inches and 5 feet 6 inches by 23.

Omitting boys under 17 years of age, the highest proportion of recruits approved was between 17 and 18 years of age, and between 5 feet 3 inches and 5 feet 4 inches in height, namely, 2,706 per 10,000. The next highest proportion was 2,244 per 10,000 among recruits under 5 feet 3 inches in height at the same age. In the preceding year the highest proportion was among recruits between 17 and 18 years of age, and between 5 feet 4 inches and 5 feet 5 inches in height; the next highest being among recruits under 5 feet 3 inches in height at the same age.

With regard to the recruits between 18 and 19 years of age, at which age the great majority of recruits is obtained, 2,173 per 10,000 were between 5 feet 4 inches and 5 feet 5 inches in height, and 2,007 per 10,000 between 5 feet 3 inches and 5 feet 4 inches. This shows a decrease as compared with the previous year, when the proportion per 10,000 was 2,053 among recruits between 5 feet 4 inches and 5 feet 5 inches in height, and 1,827 among recruits between 5 feet 3 inches and 5 feet 4 inches in height.

The next table shows the weights of the recruits who were finally approved, and the proportion of each weight per 10,000. It also shows the weights of these recruits arranged in series according to age, together with the proportion per 10,000 of each weight at each age :—

TABLE VII.

Weights of Recruits finally approved for Service.	Boys under 17 Years.	Between 17 and 18.	Between 18 and 19.	Between 19 and 20.	Between 20 and 21.	Between 21 and 22.	Between 22 and 23.	Between 23 and 24.	Between 24 and 25.	25 Years and upwards.	Total at each Weight.
Under 100 lbs. ...	1,785	21	18	1	1	—	—	—	—	2	1,828
100—110 lbs. ...	326	185	1,158	171	37	26	9	10	10	18	1,950
110—120 ,, ...	110	229	8,329	2,159	860	414	222	146	100	119	12,688
120—130 ,, ..	45	97	6,009	2,954	1,526	952	594	487	346	332	13,342
130—140 ,, ..	12	55	2,790	1,904	1,229	909	676	522	450	448	8,995
140—150 ,, ...	1	15	986	821	659	563	449	404	384	384	4,666
150—160 ,, ...	—	4	246	234	282	220	240	150	211	218	1,814
160—170 ,, ...	—	—	86	72	90	71	71	79	62	114	645
Upwards of 170 lbs.	—	—	15	23	15	21	28	20	38	61	221
Total at each age	2,279	606	19,637	8,339	4,699	3,176	2,289	1,827	1,601	1,696	46,149

Weights of Recruits finally approved for Service.	Proportions per 10,000 at each Age.										Total Proportion of each Weight per 10,000.
	Boys under 17 Years.	Between 17 and 18.	Between 18 and 19.	Between 19 and 20.	Between 20 and 21.	Between 21 and 22.	Between 22 and 23.	Between 23 and 24.	Between 24 and 25.	25 Years and upwards.	
Under 100 lbs. ...	7,832	346	9	1	2	—	—	—	—	12	396
100—110 lbs. ..	1,430	3,053	590	205	79	82	39	55	62	106	423
110—120 ,, ...	483	3,779	4,241	2,589	1,830	1,303	970	799	625	702	2,749
120—130 ,, ...	198	1,601	3,060	3,542	3,248	2,997	2,595	2,666	2,161	1,958	2,891
130—140 ,, ...	53	908	1,421	2,283	2,615	2,862	2,953	2,857	2,811	2,641	1,949
140—150 ,, ...	4	247	502	985	1,402	1,773	1,962	2,211	2,399	2,264	1,011
150—160 ,, ...	—	66	125	281	600	693	1,049	870	1,318	1,285	393
160—170 ,, ...	—	—	44	86	192	224	310	432	387	672	140
Upwards of 170 lbs.	—	—	8	28	32	66	122	110	237	360	48
Total	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000

Compared with the corresponding return for the previous year an increase of 81 per 10,000 has occurred in the proportion of recruits under 100 lbs. in weight, of 40 between 100 and 110 lbs., and of 82 between 130 and 140 lbs., of 72 between 140 and 150 lbs., of 5 between 150 and 160 lbs., and of 13 in the proportion of recruits between 160 and 170 lbs. in weight. The proportion of recruits per 10,000 between 110 and 120 lbs. in weight has decreased by 195, by 88 between 120 and 130 lbs., and by 10 in the proportion of recruits over 170 lbs., in weight. *United Kingdom.*

Omitting boys, the highest proportion of recruits approved was between 18 and 19 years of age and between 110 and 120 lbs. in weight, namely, 4,241 per 10,000. The next highest number was 3,779 per 10,000 among recruits between 17 and 18 years of age and between 110 and 120 lbs. in weight. In the preceding year the highest proportion was at the same age and weight as in the year under report, but the next highest was among recruits between 19 and 20 years of age and between 120 and 130 lbs. in weight.

In the next table are shown the chest measurements of recruits finally approved, and the proportion of each measurement per 10,000. The table also shows the chest measurements, arranged in series according to age, together with the proportion per 10,000 of each chest measurement at each age.

TABLE VIII.

Chest measurement of Recruits finally approved for Service.	Boys under 17 Years.	Between 17 and 18.	Between 18 and 19.	Between 19 and 20.	Between 20 and 21.	Between 21 and 22.	Between 22 and 23.	Between 23 and 24.	Between 24 and 25.	25 Years and upwards.	Total at each Chest Measurement.
Under 31 inches ...	1,757	20	155	13	4	—	4	—	—	1	1,954
31—32 inches ...	320	134	2,875	371	155	104	38	69	22	10	4,098
32—33 ,, ...	109	185	4,660	1,594	560	378	230	212	93	79	8,100
33—34 ,, ...	58	142	5,251	2,100	1,091	672	393	299	250	232	10,488
34—35 ,, ...	27	84	3,602	1,971	1,139	694	498	374	320	339	9,048
35—36 ,, ...	5	29	1,926	1,207	840	626	479	329	325	375	6,141
36—37 ,, ...	2	8	765	669	546	364	346	272	278	264	3,514
37—38 ,, ...	1	3	301	310	244	226	199	174	173	194	1,825
Above 38 inches ...	—	1	102	104	120	112	102	98	140	202	981
Total at each age	2,279	606	19,637	8,339	4,699	3,176	2,289	1,827	1,601	1,696	46,149

Chest measurement of Recruits finally approved for Service.	Proportions per 10,000 at each Age.										Total proportion of each Chest Measurement per 10,000.
	Boys under 17 Years.	Between 17 and 18.	Between 18 and 19.	Between 19 and 20.	Between 20 and 21.	Between 21 and 22.	Between 22 and 23.	Between 23 and 24.	Between 24 and 25.	25 Years and upwards.	
Under 31 inches ...	7,710	330	79	15	8	—	17	—	—	6	423
31—32 inches ...	1,404	2,211	1,464	445	330	327	166	378	137	59	888
32—33 ,, ...	478	3,053	2,373	1,911	1,192	1,190	1,005	1,160	581	466	1,755
33—34 ,, ...	255	2,342	2,674	2,518	2,322	2,116	1,717	1,637	1,562	1,368	2,273
34—35 ,, ...	118	1,386	1,834	2,363	2,424	2,185	2,176	2,047	1,999	1,999	1,961
35—36 ,, ...	22	479	981	1,449	1,788	1,971	2,093	1,801	2,030	2,211	1,331
36—37 ,, ...	9	132	390	802	1,162	1,146	1,511	1,489	1,736	1,556	761
37—38 ,, ...	4	50	153	372	519	712	869	952	1,081	1,144	395
Above 38 inches ...	-	17	52	125	255	353	446	536	874	1,191	213
Total	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000

United Kingdom.

Compared with the return for the preceding year, an increase of 113 per 10,000 has occurred in the proportion of recruits under 31 inches chest measurement, of 434 between 31 and 32 inches chest measurement, and of 330 in that of recruits between 32 inches and 33 inches chest measurement. The proportion of recruits between 33 inches and 34 inches chest measurement has decreased by 86, between 34 inches and 35 inches chest measurement by 425, and above 35 inches chest measurement by 366.

Omitting boys, the highest proportion of recruits at any age and of any chest measurement was 3,053 among recruits between 17 and 18 years of age, and between 32 and 33 inches chest measurement, as compared with 2,889 among recruits between 21 and 22 years of age, and between 34 and 35 inches chest measurement in the previous year.

Excluding boys under 17 years of age, the following general results are obtained :—The average age of recruits finally approved was 19·5 years, as compared with 19·6 in 1902 ; the average height was 65·5 inches, as compared with 65·2 in the previous year ; the average weight 122·6 lbs., as compared with 122·1 in the preceding year ; and the average chest measurement 33·6 inches, as compared with 33·9 in 1902.

The next table shows the state of education of recruits finally approved, together with the proportion per 1,000 of those well educated, able to read and write, able to read only, or unable to read.

TABLE IX.

	Numbers finally approved.	Proportion per 1,000.
Well educated	3,384	73
Able to read and write..	41,683	903
Able to read only	550	12
Unable to read	532	12
Total	46,149	1,000

Compared with the corresponding table for the preceding year an increase of 17 per 1,000 has taken place in the proportion of recruits returned as well educated, of 3 in recruits able to read only, and of 1 in recruits unable to read, but a decrease of 21 in the proportion of recruits able to read and write.

SANITARY CONDITIONS, UNITED KINGDOM, 1903.

North-Eastern District.

United Kingdom.

The Principal Medical Officer (Colonel M. D. O'Connell M.D., R.A.M.C.), reports that the general health of the troops during the year has been excellent. No disease appeared amongst the troops in the district in epidemic form. Small-pox prevailed in several stations amongst the civil population but no case occurred amongst the troops or families in the district. Enteric fever also, although prevalent in several stations amongst the civil population caused no admissions—the solitary case which occurred being contracted in South Africa.

The following are the sanitary notes relating to the various stations in the district and the improvements effected during the year :—

Bradford.—The hospital was closed during September, and the sick treated in the Military hospitals at Leeds and Halifax : arrangements have been made for serious cases to be admitted to the civil hospital. During the year new pans for w.c.'s in detention ward were fitted.

Derby.—Only sanitary improvements of a minor character were carried out during the year.

Halifax.—Some surface gutters were relaid.

Leeds.—No sanitary works were carried out during the year.

Leicester.—Baths were renewed and night urinals provided. The warming of the hospital is reported to be inefficient.

Lincoln.—Some surface channels were relaid and gully traps renewed in barrack square. Night urinals were provided. Baths were renewed.

Newcastle-on-Tyne.—Minor defects in the hospital have been remedied from time to time. The drainage was examined and man-holes provided in the Royal Artillery and Infantry barracks. In Royal Artillery barracks the roof of "K" block was raised, thus providing increased cubic space. In the city of Newcastle numerous cases of small-pox have occurred but none of the troops were attacked.

Pontefract.—No sanitary improvements have been carried out during the year, but the surface drainage is reported to be defective and representations concerning this have been made.

Richmond.—The main drain has been provided with man-holes.

Scarborough.—A stove has been supplied to hospital ward which much improves the heating. A concrete floor has been laid in barrack kitchen.

Sheffield.—The civil population around barracks have suffered from scarlet fever, measles, &c., but only one case of the former disease occurred among the troops. Pans were renewed in w.c.'s of hospital, and in those set apart for the use of children and officers' servants. The floor of hospital lavatory was also renewed.

At *Strensall* the floors of huts, latrines and urinals were renewed.

York.—In the Cavalry and Infantry barracks some minor improvements in drainage and lighting have been carried out. In the military prison, York Castle, ventilation has been improved, and some drains have been relaid. In the station hospital the w.c.'s are being renewed and new floors laid down.

North-Western District.

The Principal Medical Officer (Colonel A. W. Duke, M.D., R.A.M.C.) reports that the general health was, on the whole, very good. There were 4 cases of enteric fever in the district, but none of these could be ascribed to defects of sanitation in the barracks in which they occurred. Diphtheria

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caused 1 admission at Delamere Camp; no cause for the disease could be assigned. There was an outbreak of measles among the children at Bury which caused 20 admissions, and there were also 37 admissions for this disease at Warrington. At both places the disease was of a mild type.

The following notes are compiled from the sanitary reports from the several stations in the district :—

Ashton-under-Lyne.—The general health of the troops has been good and the sanitary conditions satisfactory. There were 3 cases of scarlet fever amongst the children ; no other infectious disease occurred.

Birmingham.—The health of the troops has been satisfactory. The barracks are old, but kept in a satisfactory sanitary condition. The only infectious disease reported are 6 cases of measles among the children. An improvement has been made in the hot-water supply to bath of hospital.

Bury.—The sanitary condition was satisfactory and the general health of the troops good. An outbreak of measles of a mild type occurred among the children.

Burnley.—These barracks were opened as a temporary measure on the 16th March and closed on the 22nd April.

Carlisle.—The health of the troops has been very good and the sanitation satisfactory. Infectious diseases were represented by 1 case of measles among the women and 4 among the children. There was an outbreak of small-pox among the civil population.

Chester.—Health of the troops has been good and sanitation satisfactory. One case of scarlet fever occurred and was treated in the civil isolation hospital. The ablution room has been improved this year, hot-water apparatus provided and the latrines reconstructed. In the Militia barracks the men's latrine and a man-hole have been reconstructed.

Coventry.—The health of the troops and the sanitary condition of the barracks are reported to have been good.

Fleetwood.—The health of the troops and the sanitary conditions were satisfactory. The hospital is used as a convalescent station for patients who are likely to benefit by a change. It is a seaside resort and well known for its bracing air. One case of scarlet fever occurred among the children. A new scullery has been provided in the barrack warden's quarters.

Lancaster.—The general health of the troops and the sanitary condition of the barracks have been satisfactory. Three cases of scarlet fever occurred among the children. No other infectious disease occurred, although small-pox was prevalent among the civil population. A new w.c. for warrant officers' quarter No. 1 has been provided, also covers for water cisterns.

Lichfield.—The health of the troops and the sanitation of barracks have been good. One case of enteric fever admitted to hospital is reported to have contracted the disease at Liverpool.

Seaforth.—The general health of the troops and the sanitary condition of barracks are reported as having been good. Two cases of scarlet fever occurred among the men and 4 among the children, single cases of measles occurred among the women and children, and 1 case of diphtheria among the latter. In all these cases the infection was caught outside barracks, some sporadic cases of each disease having occurred in the district.

Hulme (Manchester).—One case of enteric fever occurred, probably due to the milk supply. Although the barracks are of antiquated structure and in a poor part of the city, the general sanitation has been good. Several minor improvements have taken place during the year.

Preston.—The general health of the troops was good and the sanitation satisfactory. Four cases of scarlet fever occurred among the men and 2 among the children, they are reported as having probably been contracted in the town and were of a mild type. The hospital is very old-fashioned but otherwise satisfactory.

Shrewsbury.—The general health has been good and sanitation satisfactory. There were 2 cases of measles of a mild nature among the children.

Warrington.—The health of the troops and the sanitary condition has been good. One case of enteric fever occurred among the men and 1 among the women. The first case is supposed to have been contracted in the town, but the origin of the second could not be traced. Three admissions for scarlet fever and 37 for measles occurred among the children, the latter were all

mild cases and were probably contracted at the schools in the town. The prisoners' room has been enlarged, and a w.c. for barrack warden's quarters provided. *United Kingdom.*

Warwick.—The general health of the troops has been good and the sanitation satisfactory. A new w.c. has been provided in the regimental institute and a new slop sink to the hospital. The yard of the hospital has also been paved.

Worcester.—Health of troops has been very good and sanitation satisfactory.

Wrexham.—Health of troops and sanitation have been satisfactory. There were single cases of small-pox among the women and children; in the latter case the disease was contracted from the mother, wife of the hospital sergeant, living in quarters in hospital. The source of contagion was doubtful but some suspicion was attached to a militiaman who was diagnosed chicken-pox and with whom the woman's husband was in occasional contact. The patients were removed to the civil small-pox hospital and both made a satisfactory recovery.

The water supply at all stations in the district was good and abundant and pure in quality. The supply of hot water to the baths in the various barracks is being increased. Every facility is given to the troops to indulge in outdoor recreations such as football, cricket, etc., and at most stations bathing parades are regularly carried out during the summer months.

The camps in occupation during the year were Altcar, Beaumaris, Chipping, Delamere, Wedgnock, Trawsfynydd, Warwick Common, and Ross. The sanitary conditions were satisfactory and there was very little sickness at any of the camps. At Altcar and Ross there were cases of small-pox among the militia.

Eastern District.

The Principal Medical Officer (Colonel W. B. Slaughter, R.A.M.C.) reports that the general health of the troops has been, on the whole, satisfactory, and no case of sickness was directly attributable to any sanitary defects in barracks. Thirty cases of scarlet fever were admitted—20 at Colchester, 7 at Great Yarmouth, 2 at Warley, and 1 at Norwich. Those at Colchester were chiefly amongst the infantry, and the cause was not apparent. The cases at Great Yarmouth were boys of the Royal Garrison Artillery, one of whom was admitted on rejoining from furlough, and from whom 4 of the other lads probably contracted the disease. Four cases of diphtheria occurred at Great Yarmouth, and one each at Colchester and Warley, the source of infection in which was not traced. Nineteen cases of diphtheria occurred among the children—12 at Colchester, 5 at Great Yarmouth, and 1 each at Norwich and Ipswich. The cases at Colchester all occurred among children attending the infants' school in Meanee barracks, and the schools were closed for two months in consequence. The latrines and urinals attached to the school were in a very insanitary condition in August, and since representation improvement has been effected; the dry earth system and obsolete urinals are deprecated, but as barracks are under reconstruction it is hoped the system will be superseded by more modern methods. Two cases of enteric fever occurred at Warley, the cause of the first could not be traced, and the second occurred in the person of a man of the Royal Army Medical Corps who was an attendant on the first case. One case of enteric fever occurred amongst the officers at Colchester, and was probably contracted from eating oysters. The two admissions for enteric fever at Weedon were men who had contracted the disease abroad. There was overcrowding during the earlier and latter parts of the year throughout the district generally. During the summer, men were placed under canvas, whilst during the winter the overcrowding was partially remedied by sending numbers on furlough.

United Kingdom.

The following is a summary of the sanitary condition of the several stations in the district:—

Bedford.—The health of the troops has been good and the sanitary condition satisfactory. The night urinals have been provided with lights, and the guard-room w.c. has been improved by bringing the soil pipe outside. A proper pack store is badly needed in the station hospital, as at present the only accommodation is a space under a staircase, which is totally unsuitable.

Bury St. Edmunds.—The health of the troops was good, and the sanitary condition satisfactory. The flushing apparatus in latrines is of old pattern, as are also the baths and basins in ablution rooms. Lighting of night urinals has been provided.

At *Colchester* the general health of the troops has been good and the sanitary condition of the permanent barracks satisfactory, but the old wooden huts still occupied are not wind and rain proof and require constant repairs; the exterior of the huts received a coat of paint during the autumn. The latrine and water supply of temporary infants' school, Meanee barracks, have been improved, but they are of old pattern and unsatisfactory. These schools were closed in September and October owing to an outbreak of seven cases of diphtheria amongst the children. The foul drainage of the military prison has been reconstructed and lighting of night urinals provided in all barracks. In the Cavalry barracks some of the married quarters have been improved by the addition of sculleries and w.c.'s and single-room quarters have been converted into two-roomed quarters with scullery and w.c. The latrines in these barracks should be remodelled, as the present ones are of old and defective construction. The flushing of the latrines in the new barracks has been rendered more satisfactory. A new barrack, known as "Goojerat barracks," was completed and occupied in March. These barracks possess all the latest requirements and are provided with dining rooms for the men separate from the barrack rooms. The restaurant system of providing meals has been tried with satisfactory results. Thirty-two new married quarters of the cottage type were completed and occupied, and are a great improvement on the older type.

At *Harwich* the health of the troops has been good and the general sanitary condition satisfactory. Latrines with separate w.c.'s and urinal with water supply have been provided at Beacon Battery.

At *Ipswich* the health of the troops and sanitary conditions were satisfactory. There has been overcrowding through insufficient accommodation, but no injurious results have been reported. The conversion of the latrines to modern pattern has been taken up as a separate question and included with a scheme for improvement of latrines generally throughout the district. The prisoners' room is insufficiently lighted and this has not yet been remedied although representations have been put forward. The ventilation of the meat store has been improved.

At *Landguard Fort* the health of the troops has been good. New barracks are being built and when completed it is hoped the present old and somewhat damp rooms will be vacated. The building of new married quarters is recommended, as also a new hospital—at present a barrack room with four beds answers for the latter purpose.

At *Northampton* the health of the troops has been good and the sanitary condition satisfactory. The whole of the drainage has been remodelled, new w.c.'s have been provided for the married families and new urinals for the barracks. Means of lighting night urinals have also been provided. The lighting and ventilation of the prisoners' room requires improvement.

At *Norwich* the health of the troops has been good and the general sanitary condition satisfactory. Lighting of night urinals has been provided and women's latrine improved. Hospital accommodation for women and children is recommended to be provided.

At *Warley* the health of the troops has been good and the sanitary condition satisfactory. Latrines in barracks are of old pattern and unsatisfactory. The bath room in depôt barracks is too old and cold. Lighting has been provided for night urinals. Annexes for w.c.'s and bath rooms should be built on to the hospital, and those at present in use should be converted

into sculleries for wards. The accommodation for Royal Army Medical Corps and nursing sisters is not satisfactory. A hospital for women and children is needed. *United Kingdom.*

At *Weedon* the health of the troops has been good and the sanitary condition is described as fairly satisfactory. Latrine, urinal and bath accommodation are all old and unsatisfactory. Reading and recreation rooms and wet canteen are too small. The married quarters are cramped and unsatisfactory, and are not provided with sinks. There is a dual water supply to barracks which is undesirable. Notice boards have been placed beside all taps which supply water unfit for drinking.

At *Great Yarmouth* the health of the troops has been satisfactory as also the sanitary condition. A school in barracks for the children is required.

Western District.

The Principal Medical Officer (Colonel G. D. Bourke, R.A.M.C.) reports that the health of the troops throughout the district has been good, and the general sanitary condition of the barracks satisfactory. A number of minor works have been carried out, and the supply of hot water for bathing purposes has been increased.

The following is a summary of the sanitary conditions in the several stations in the district:—

Bodmin.—The sanitary condition is reported satisfactory. The parade ground is being repaired and drained.

Brecon.—The health of the troops has been good and the sanitary condition satisfactory.

Horfield (Bristol).—The sanitary condition has been satisfactory and the health of the troops is described as having been exceptionally good.

Cardiff.—Two flushing tanks are being provided for drains. The married quarters are being re-appropriated; this will provide for an additional room in each quarter. A smoking shelter has also been built for the patients in hospital.

Devonport.—The health of the troops has been very good. The sanitary officer for the district at his inspection of the barracks and various forts brought to notice many defects which have, in most instances, been remedied. At the Citadel Barracks the cleaning of water cisterns, repairs to latrines, and other minor improvements have been carried out. At Drake's Island the w.c.'s for families and non-commissioned officers' have been repaired. Surface rubbish has been removed from the North Front. Barrack rooms generally have been limewashed. At Mount Wise an entire drainage system has been laid on modern principles. In the military prison a new wing, containing cells, which are well warmed and ventilated, and a new cookhouse and offices are in process of construction.

Exeter.—The general health of troops has been very good and the sanitary condition of barracks and quarters satisfactory. At Topsham barracks a new scheme of reconstruction is being carried out, and many improvements are being made. A new bath-house has been provided by re-appropriating a wash-house. The Officers' mess, single officers' quarters and married quarters are being re-constructed, the latter to provide accommodation for 6 officers. A new riding school has been built.

Newport.—The health of the troops has been very good. The drainage of the whole of the barracks is being relaid on modern principles. New w.c.'s for each of the married quarters are being built on each landing as annexes, in place of the old-fashioned latrines outside. The "restaurant" system of serving meals has been adopted and is said to be much appreciated by the men.

Okehampton.—The health of the troops has been good. The septic tank is not large enough to deal with the amount of sewage when there are

United Kingdom.

a number of troops there, and latrines on the dry earth system have to be used.

Pembroke Dock.—The general health of the troops has been good. The construction of the new infantry barracks is progressing. "A" "B" and "C" blocks have now been provided with cookhouses, dining rooms, boiler-house, and drying room. The present hospital is in old huts which, though clean, are not suitable. At the Defensible barracks better ventilation has been procured by putting in more windows. At Pennar barracks, "B" block has been completed and equipped with all modern requirements.

Taunton.—The health of the troops has been good and the sanitary condition satisfactory.

Falmouth.—The health of the troops and the sanitary condition is described as good. Many of the new married quarters are very damp, one quarter being so bad that it was closed during the year as unfit for habitation.

As funds permit, new buildings and sanitary improvements are being carried out through the district. Gymnastic exercises have had a beneficial effect on the men, and their weight and chest measurement have increased; this being particularly noticed at the prison gymnasium, Devonport.

Southern District.

The Principal Medical Officer (Colonel J. J. Morris, M.D., R.A.M.C.) reports that the general sanitary state of the various stations in the district has been very good. The general health of the troops is described as fair.

The following are the sanitary notes relating to the several stations in the district and the improvements which have been effected during the year:—

Devizes.—The regimental institute and sergeants' mess have been enlarged and improvements made in the ventilation and gymnastic apparatus.

Dorchester.—Some alterations have been made so as to improve the ventilation of the married quarters.

Golden Hill Fort (I. W.)—The new hospital is nearing completion and will be finished early in 1904.

Parkhurst (I. W.).—The new mess block for officers, and quarters for officers and warrant officers have been completed and occupied, the huts are nearly all demolished and cleared away.

Portland.—The new drainage system in the Verne Citadel is stated to be answering well. Ventilators have been provided to the passage at the back of barrack rooms in south-west range. Several other minor improvements have also been effected. A combined bed pan and urine-bottle sink has been provided in the station hospital.

Gosport.—The new foul drainage scheme has made considerable progress, the military prison and Fort Brockhurst portions being complete and ready for connection with the civil system when this is ready to take the foul sewage.

Hilsea.—The neighbourhood of the barracks was not in a satisfactory condition owing to the proximity of the site for depositing town refuse; this was represented to the civil authorities and the practice discontinued. The surface drainage was bad, the fall being insufficient; this is being remedied by remodelling the system.

Portsmouth.—The barrack rooms at Point barracks have been treated to remedy the dampness which had existed. To avoid overcrowding, men of the Rifle Brigade stationed in Victoria barracks were placed under canvas, and others were sent to furlough.

Trowbridge.—The earth closets at the officers' mess gardens and No. 1 married quarter have been converted into w.c.'s, and a cesspit connected with the guard-room drainage abolished.

Weymouth.—Two w.c.'s and a bath room are being constructed for the use of officers at the Red barracks.

Winchester.—A large portion of the new barracks have been completed, electric light installed, and drainage finished. *United Kingdom.*

Gymnastic training has been systematically carried out with beneficial results. The education of the soldier in matters of personal hygiene has been duly attended to with good results. At some stations hot water was not always obtainable for bathing purposes, but on attention being drawn to the matter the difficulty was at once removed.

Netley.

The Principal Medical Officer (Surgeon-General Sir E. Townsend, M.D., K.C.B., C.M.G., A.M.S.) reports that the water supply is both good and sufficient, the ventilation satisfactory, and the warming fairly good. The new system of drainage is still in course of construction, the conversion from earth closets to water closets in "A" square is being carried out, and the new latrines added.

There has been no particular prevailing disease, and no overcrowding. The cooking apparatus is described as working fairly well, but a remodelling of the kitchen on more modern lines is desirable. Some internal constructive alterations are being made for the accommodation of the nursing sisters. An electric installation is being carried out in "A" wing and the administrative block. Ten large and three small annexes to wards have been completed, and combined bed-pan and urine-bottle sinks have been erected in some of the ward annexes.

The general sanitary condition of the lunatic hospital is reported to have been satisfactory. Of the numbers discharged from this hospital during the year, 54·24 per cent. had sufficiently recovered to be handed over to the care of their friends. In 1902 there were 65 per cent. and in 1901 a similar percentage.

The total number of invalids from abroad amounted to 3,088. Of this number 28 died, 1,697 were discharged to duty and 1,468 were invalided from the service.

Salisbury Plain District.

The Principal Medical Officer (Colonel W. Donovan, C.B., R.A.M.C., reports that the general health of the troops quartered in the district has been very good, and the sanitary condition of the camps, barracks etc., satisfactory. Quarters have been provided near the Station Hospital for a Quartermaster, Royal Army Medical Corps, and two huts for men of the corps within the hospital enclosure.

Many minor improvements in the hospital, including increased latrine accommodation, and the provision of a small operating room in a Doecker hut have been carried out.

A small hospital for infectious cases is under construction and will be available at an early date. The dry earth system of conservancy is being gradually abolished and a water carriage system substituted. At Tidworth a hut has been re-appropriated as a temporary hygienic laboratory and is about to be fitted up for the use of the district. More suitable accommodation has also been found for a medical inspection room.

South-Eastern District.

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The Principal Medical Officer (Colonel R. H. Quill, M.B., R.A.M.C.) reports that the health of the troops shows an improvement as compared with 1902.

The following is a summary of the sanitary reports from the various stations:—

Brighton.—A great deal has been done during the year to improve the drainage of the barracks. The inspection arrangements being defective, numerous man-holes have been introduced at the drainage junctures, and these facilities for inspection are being added to. There has been a complete re-installation of the station hospital drainage system which is now quite satisfactory. There have been minor improvements but much requires to be done before the hospital can be considered quite satisfactory.

Canterbury.—The Artillery barracks are described as being so old and decayed as to be barely fit for occupation, and a similar opinion is expressed regarding the huts in the Cavalry barracks. The surface drainage of the barracks being defective has lately been relaid on an improved plan. A "Thresh's" portable disinfector has been approved for the station hospital and is expected shortly. A w.c. is required for the isolation block. The general drainage system of the barracks is now working very satisfactorily.

Chichester.—The renovation of the huts, which constitute the barracks, still continues and the result is a very great increase in the comfort of the occupants. The gas lighting of barracks and hospital for some time had been defective, and the gas pipes have now been relaid with satisfactory results.

Dover Castle.—The "Long" casemates are structurally unfit for occupation. At the station hospital, an operating room, fully equipped, has been completed and handed over for use. An excellent milk steriliser has been fixed in the kitchen.

Western Heights.—The Archcliffe Yard barracks, occupied by the Army Service Corps, are frequently overcrowded. To remedy this it is under consideration to take over for Army Service Corps use an adjoining barrack, at present occupied by the Military Police.

Eastbourne.—The position of the Convalescent Hospital is at present unsatisfactory, due to two lines of houses having been gradually built between the hospital and the sea. The result is a very undesirable one, shutting in the hospital from the sea view and sea air. Two hot-water baths are being put up in the redoubt for the use of the troops quartered there.

Hythe.—The old block of married quarters are structurally insanitary and quite out of date, and are described as being little more than mere huts, which in past years were used as store rooms. In the hospital there is no separate room for the accommodation of foul linen; it has, therefore, to be kept in the same room as the clean linen, an obviously undesirable arrangement. This has been brought to notice for adjustment.

Lydd.—The fuel allowance for hot baths is insufficient and an increase has been recommended. At the station hospital it is brought to notice that cupboards are required for the storage of ward brooms, &c., as at present these articles have to be accommodated in the wards. A mortuary is also noted as being required.

Shorncliffe.—The general sanitary arrangements connected with Shorncliffe camp are satisfactory. It is pointed out that the turret annexes specially built for the reception of night urine tubs are not used for their legitimate purpose, and it is obvious that there should be gas burning in these annexes at night, otherwise the floor would surely be fouled. Recommendations have been made to ensure the proper lighting of the annexes at night. In Risborough barracks the sergeants' mess has no urinal. This deficiency has been duly reported, as also the insufficient accommodation in the room attached to the men's supper bar. A w.c. is required for the isolation block.

Thames District.

United Kingdom.

The Principal Medical Officer (Colonel W. J. R. Rainsford, C.I.E., R.A.M.C.) in his report states that he is unable to attribute any undue amount of sickness to sanitary defects in barracks.

The following is a statement of the sanitary conditions, and sanitary services carried out at the various stations during the year :—

Chatham.—The drainage has been remodelled at old Government House, and No. 1 field officer quarters, Brompton. New baths have been added to the casemate wards at Fort Pitt. Hot water has been supplied to the baths in Brompton barracks. At the Royal Engineer Institute four w.c.'s and urinals have been provided for staff and non-commissioned officers.

Gravesend.—Some new pattern latrines are in course of construction.

Maidstone.—A new guard room and cells have been erected.

Sheerness.—A considerable number of minor works have been carried out which are hardly important enough to mention in detail.

Shoeburyness.—Reconstruction of the drainage at the station hospital and "A" to "M" married quarters has been carried out.

Home District.

The Principal Medical Officer (Colonel A. T. Sloggett, C.M.G., R.A.M.C.) reports that there is an improvement in the health of the troops as compared with the previous year.

The following is a summary of the sanitary conditions and improvements effected during the year at the several stations :—

Caterham.—It is pointed out that only one-third of the total depôt sewage is treated at the outfall, and that only partially, by the Scott-Moncrieff installation. The sanitary condition of the neighbourhood of the depôt is most unsatisfactory.

Guildford.—The surface drainage is described as being defective. The school room is too small. Bath rooms are required in the officers and married quarters. Taps connected directly with the main have been put in ablution rooms to provide drinking water.

Hounslow.—The officers' quarters on the Heath are not at all satisfactory, as being unprotected from the weather they become damp and often saturated with rain; the erection of porches to remedy this has been recommended. The lavatories in connection with the itch and prisoners' wards require remodelling. Improvements have been carried out in the drainage of the ground round the huts.

Kingston-on-Thames.—It is pointed out that more w.c. accommodation is required for the married quarters; at present only one block is provided with them, and this is a very serious inconvenience especially in winter. A new latrine and flushing apparatus for officers' mess and officers' servants have been supplied, and a new latrine has been added to No. 1 passage, "E" block. A new flushing apparatus to married quarters, and new discharges to sinks, where faulty, have been provided.

Regent's Park and *Hyde Park Barracks.*—The health of the troops occupying these barracks is described as good and the sanitary condition satisfactory.

London, S. W.—The sanitary condition of the various barracks is stated to have been satisfactory. At Chelsea, a new system of separate latrines for each sex in the infants' school has been carried out. At Wellington, four new bath rooms have been constructed on the most recent improved sanitary lines, and an entirely new system of drainage has been carried out in connection with the new latrines, etc. The present hospital accommodation is again described as very deficient and defective.

At the *Tower of London*, the water supply, though good, is not as abundant as it should be in case of its being cut off from the main. This has been brought to notice.

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St. John's Wood.—The general health has been good and the sanitary condition satisfactory. Some slight defects in drainage have been rectified.

Oxford.—The ventilation of prisoners' room has been improved.

Windsor.—The health of the troops has been good and the sanitary condition satisfactory. The station hospital for cavalry is described as unsatisfactory and arrangements are being made to evacuate this building at an early date.

Woolwich District.

The Principal Medical Officer (Colonel W. J. R. Rainsford, C.I.E., R.A.M.C.) reports that the health of the troops has been good and the sanitary conditions generally satisfactory. The supply of hot water to the baths in barracks has been recommended. It has been found necessary to re-appropriate four hospital huts for the use of men of No. 12 company, Royal Army Medical Corps, on account of increase of strength. The new Army Medical Stores have been completed and will shortly be taken into use.

A room in the basement of the Royal Herbert Hospital is being fitted as a pathological laboratory. The lighting of the hospital by electricity has been recommended. The present mortuary is described as being too small for such a large hospital. The flooring in barracks generally has been renewed, and the better lighting at night of latrines, night urinals, and urine tub stands has been carried out.

A block of stables belonging to the remount depôt, which created a serious nuisance, is being demolished. In the hospital for soldiers' wives and children the lighting is described as insufficient, and this has been brought to notice. It is hoped that lighting by electricity will be sanctioned.

Royal Military Academy.—The general health of the gentlemen cadets has been satisfactory. The drainage system was examined during the year and certain improvements effected.

Aldershot.

The Principal Medical Officer (Surgeon-General W. H. McNamara, M.D., C.B., C.M.G., A.M.S.) reports that the health of the troops compares favourably with the previous year.

Enteric fever gave rise to 27 admissions among the troops. Of these, 16 were attributed to infection in South Africa and on board ship, 3 were contracted on furlough, and in the remaining 8 the origin could not be traced.

The general sanitary condition of barracks and quarters is on the whole satisfactory. Systematic and frequent inspections have been made, defects noted, reported, and promptly remedied. A considerable amount of work has been carried out in the chemical and bacteriological laboratory during the year. In several urinals the slates and channels have been renewed, and the urinals in Talavera and Badajos barracks are noted as requiring renewal. The concrete urinals in parts of the Cavalry barracks are unsatisfactory and should be replaced by slate ones.

Additional urinal accommodation is required near the canteens at Blenheim, Malplaquet, and Oudenarde barracks. There has been considerable difficulty experienced in having the urine tubs kept in a satisfactory condition. It would be well if these could be abolished and small urinals provided on each landing. The cookhouses are kept in good condition, but the wooden plank tables are unsuitable and should be replaced by stone, slate or marble slabs. Annexes should be added to each cookhouse and means of ablution provided.

The ablution accommodation is sufficient, and the water supply has been satisfactory. The drainage, with the exception of that for storm water at Blenheim barracks, which in heavy rain is frequently blocked, has been satisfactory.

United Kingdom.

At *Blackdown* and *Deepcut* considerable advance has been made in the construction of married quarters. The accommodation provided for institute, sergeants' messes, etc., at both places is insufficient. The concrete urinals should be replaced by slate ones.

At *Ewshott* the state of barracks is satisfactory, but several complaints were received regarding the disposal of sewage.

Longmoor and Bordon.—A large number of huts have been removed from Longmoor to more suitable sites at Bordon. The construction of married quarters is proceeding. Laundries are required at both places. The "Stoddarts" installation at Bordon is acting satisfactorily and more land is being made available for treatment of the effluent. Temporary arrangements for disposal of the sewage from the married quarters were not satisfactory. Steps were taken to remedy the defects and new filter beds are being built as rapidly as possible. The water supply has been improved, and additional storage tanks with better means of distribution provided.

At *Woking* considerable alterations and improvements have been made in connection with the drainage and water supply.

At *Pirbright*, during the summer encampment, there were many complaints about the sewage farm, and it is proposed to do away with this and join up the drainage with the local system.

At other encampments the sanitary condition generally was satisfactory. Concrete flooring has been provided for the latrines at Twezzledown Camp and is to be supplied to the other camping grounds.

Channel Islands.

The Senior Medical Officer (Lieut.-Colonel W. J. Macnamara, M.D., R.A.M.C.) reports that the general health of the troops and the sanitary conditions of the various stations are satisfactory.

Alderney.—No sanitary improvements were reported during the year.

At *Guernsey* the reconstruction of the drainage at Fort George is being carried out. Several of the old latrines have been replaced by an up-to-date pattern. The women's wash-house, Lower Lines, has been converted into a bath-room holding two baths and with hot and cold water laid on. The water supply to Fort Hommet from the water companies' main has been completed and is in use.

Jersey.—A new out-of-door gymnasium has been completed at Fort George, and the ventilation and lighting of the guard-room cells has been improved. The floor space at St. Peter's barracks being considered too crowded, the number of beds has been reduced from 13 to 10. In addition to the supply of a slate table for the mortuary at Elizabeth Castle station hospital a number of minor sanitary improvements have been carried out.

Scottish District.

The Principal Medical Officer (Colonel F. W. Trevor, M.B., R.A.M.C.) reports that the health of the troops has been very good throughout the year. Notwithstanding the fact that small-pox has been very prevalent amongst the civil population not a single case occurred amongst the troops, doubtless due to the very efficient manner in which vaccination has been carried out.

Though from a sanitary point of view most of the barracks are quite out of date, it cannot be said that the health of the troops has suffered; still with better ventilation of barracks, and a constant water supply in place of an intermittent one, it would be reasonable to expect better health. The abolition of storage tanks for drinking water is being pressed, but has not yet been carried out. The gymnastic training the recruits receive has a good effect on their health.

The following is a summary of the sanitary conditions, etc., reported from the several stations:—

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Aberdeen.—A new hot water apparatus has been been added to the prisoners' room. New annexes to married quarters are being built. New stoves have been provided in cookhouse. The hospital has been repainted.

Ayr.—A new stove has been placed in the gymnasium. Barrack room floors have been renewed. A new bread store has been built. The drainage of barracks will shortly be linked up with the new system of town sewers. At the hospital the kitchen range has been renewed.

Barry Camp.—Was only occupied during the summer. The surface drainage is noted as requiring improvement.

Berwick-on-Tweed.—A new heating apparatus has been supplied to the guard room, and the ventilation and heating of prisoners' room much improved.

Edinburgh Castle.—The sanitary condition generally has improved during the year but the defective ventilation pointed out in previous years still continues. The ablution rooms are damp and cold. The station hospital is a new building and is in every way suitable, it has recently been thoroughly repainted. The gymnasium, from want of space, is not a good one, the wall on one side is against the rock, which makes it very damp.

Leith Fort.—The entire barracks are being pulled down and rebuilt.

Piershill.—The condition of the hospital has much improved during the year.

Fort George.—Many improvements have been made in the hospital during the year, including two new annexes, each ward now having its own. Although an old building the hospital is now in a satisfactory condition. The married quarters have been greatly improved, each family having now two rooms and a separate annexe.

Maryhill.—The health of the troops and sanitary condition have been satisfactory. There was some slight overcrowding in barracks at the beginning of the year, but this was remedied by transferring three companies of the 1st Gordon Highlanders to Aberdeen. There was also some slight overcrowding of the hospital at the same time; this was at once remedied by transferring some of the patients to the hospitals at Piershill and Glencorse.

Glencorse.—The working of the septic tank for sewage from barracks has not been satisfactory; this has been represented. The water supply shows signs of contamination, and all water for drinking purposes has to be boiled, this is done pending the connection of the barracks with the Edinburgh main from which it is intended to draw the supply.

Hamilton.—The water supply is intermittent in barracks and of somewhat doubtful quality. This has been brought to the notice of the Medical Officer of Health who is taking steps in the matter.

Inverness.—General health has been good and the sanitary condition satisfactory. An epidemic of scarlet fever has been prevalent in the town of Inverness and district, but only one case, a child, occurred in barracks.

Perth.—Scarlet fever prevailed amongst the civil population and four cases occurred in barracks. The flooring of two barrack rooms has been renewed during the year. The ward annexes at the hospital have been improved, and a new range provided in the kitchen. New stoves have also been provided in the wards. The drainage of one married quarter has been overhauled and improved.

Stirling.—Two new bath rooms, w.c.'s, etc, have been added to the hospital, which has been partly re-equipped.

Stobs.—A non-dieted hospital has been opened for the troops who are in charge of camp.

Blackness Castle.—The sanitary condition of the barracks has been satisfactory. New slate slabs have been placed in the urinal during the year. Health of troops has been good.

Dunbar and *Montrose.*—The health of the troops and the sanitary condition have been satisfactory. Non-dieted hospitals exist at both these stations. At Dunbar the barracks were closed in October, and at Montrose during the last five months of the year only a few recruits occupied the barracks.

Belfast District.

The Principal Medical Officer (Lieut.-Colonel P. H. Johnston, M.D., C.M.G., R.A.M.C.) reports that the general health of the troops has been fairly good, and compares favourably with former years, and has not been injuriously affected by any particular cause. The sanitary conditions of the various barracks have been satisfactory. *United Kingdom.*

The following is a summary of the sanitary conditions and improvements carried out at the several stations.

Armagh.—The entire drainage of the barracks is being reconstructed, except that of the new block which is a separate system.

Athlone.—Six new baths with hot and cold water have been provided.

Belfast.—At the depôt soldiers' block the system of drainage was reconstructed. At the station hospital one additional w.c. was added to each of the first and second floors, and lavatory and urinal walls re-set in glazed bricks. At entrance gate a new surface drain was constructed.

Belturbet.—The main drain has been cleared, and cleaning eyes provided.

Birr.—Four new enamelled baths (iron) have been provided.

Dundalk.—The drains were unsatisfactory, being on an old system; they, however, are flushed and cleaned from time to time. A new system is to be introduced shortly. The drainage of the officers' mess has been reconstructed.

Enniskillen.—At the station hospital the drainage has been improved.

Londonderry.—Bath rooms have been provided to old officers' quarters and drainage improved.

Mullingar.—Health of troops and sanitary state of barracks satisfactory.

Newry.—An ablution room for the men has been provided and baths renewed. A drain behind the hospital has been relaid.

Omagh.—The health of the troops has been good and sanitary conditions satisfactory.

Ballykinler Camp was opened during the month of May and closed during September. A new drinking water supply was provided.

Finner Camp was opened during May and closed in September. During this period the health of the troops was good and the sanitary condition satisfactory.

Magilligan Camp.—The site of the camp is a good one but somewhat exposed, the health of the troops was good and the sanitary condition satisfactory.

Dublin District.

The Principal Medical officer (Colonel R. Blood, M.D., R.A.M.C.) reports that the general health of the troops has been good and the sanitary condition of barracks satisfactory.

In Dublin a rather serious outbreak of scarlet fever occurred among the men and of measles amongst the children. There were 62 admissions for the former disease and 65 for the latter. These diseases were prevalent in the city, and doubtless the want of proper sanitation is a contributory factor.

The following sanitary improvements, etc., have been affected during the year:—

Curragh.—In Beresford barracks a drain has been relaid from w.c. in sergeants' mess and a man-hole provided. New man-holes have also been supplied to men's latrines. Two w.c.'s have been constructed in the officers' mess. In the Stewart barracks (infirmary stables) a w.c. has been furnished. A new barrack has been opened during the year and another will probably be ready soon. Several ranges of excellent new married quarters have been also erected during the year and will soon be taken into use. The internal lighting of the hospital and barracks has been much improved, a better pattern lamp having been issued; it is, however, represented that the supply of oil is inadequate. The external lighting of the whole camp leaves very

United Kingdom.

much to be desired. At the hospital the drain from urinal to main drain has been renewed and provided with man-holes. In the water tower a new bath has been provided. Various other improvements have also been carried out.

Dublin.—At Portobello, rooms have been re-appropriated as office for officer in charge and for waiting room, and more space has been allotted to the dispensary. It has been found difficult to keep the ward of the hospital in this barrack sufficiently warm during severe weather, the amount of fuel allowed being insufficient. A steam disinfector is being erected in Montpelier barracks. At Marlborough barracks new drains have been laid in front of married quarters, flushing tanks and night urinals have been remodelled. Covers have also been provided to man-holes and many drains overhauled. In the hospital at Richmond barracks a second bath has been provided and cisterns have been supplied to the urinals in barracks. In the Royal barracks a w.c. in the field officers' quarters has been replaced by one of modern pattern. The old orthopœdic hospital has been acquired and is being converted into a new recruiting depôt. In the district generally, lights have been provided for night urinals and urine tubs.

Galway.—In Runmore barracks the lavatory has been partly taken up and renewed, and two man-holes provided to drain from guard-room.

Kildare.—Four gullies to prevent flooding of officers' quarters have been made, and the storm drain connected with town gully. Lavatory basins have been fitted in officers' mess, and earth closets converted into water closets. In the barrack rooms, pedestals for urine tubs are at present in course of construction in the passages. Water closets and lavatory sinks have been supplied to sergeants' mess, schools, recreation room and R.E. offices. New sinks have also been fitted in the canteen.

Lusk.—The water supply is being improved and re-arranged, and ablution and bath rooms are in course of construction.

Naas.—In the officers' mess a lavatory has been added to the billiard room. The latrines in barracks have been remodelled and ablution room concreted. Hot water for baths has been supplied in the hospital.

Newbridge.—Obsolete latrines and sinks are being replaced by new pattern ones. Baths are in course of erection.

At *Glen Imaal Camp* the water supply and drainage have been improved.

At *Kilbride Camp* a sewage filter has been erected.

Cork District.

The Principal Medical Officer (Colonel C. H. Swayne, D.S.O., R.A.M.C.) reports that the general health of the troops during the year was satisfactory, and there were no insanitary conditions discovered in barracks to which any of the admissions could be definitely ascribed. The general sanitary condition of the various stations was carefully attended to. There was no overcrowding, except among the Army Service Corps at Cork; this, however, was remedied on being brought to notice. In those stations in which a gymnasium exists, the training therein had beneficial results on the health of the men.

The following improvements have taken place during the year:—

Ballincollig.—Various improvements were made in the officers' mess, "B" house officers' quarters, warrant officers' quarters, Army Service Corps bedding store, and Commanding Officer's clerk's office. A new block of married quarters and w.c.'s was taken into use, also an excellent veterinary hospital. The barracks generally were in a good sanitary condition. At the station hospital an operating room has been fitted up, ventilation of the medical comfort room improved, and the walls of wards had washable paint applied.

Bere Island.—Accommodation for 5 officers and 3 servants completed, also an officers' mess. Drainage for foul water from the lavatory laid down in connection with a septic tank. The old coastguard quarters were reconstructed for foreman of military works, and also a telephone exchange and married quarters for the Royal Garrison Artillery. Drainage for waste water from sinks was completed.

Buttevant.—New wash-houses to barracks are being completed. The drainage is not very satisfactory, and is under consideration as regards its reconstruction.

Cahir.—No special sanitary improvements were carried out during the year.

Clonmel.—Baths, with hot and cold water, were erected. Earth closets and urinals renewed, and lighted by gas; water laid on to the latrines in the married quarters and, for drinking purposes, to the schools.

Cork.—In the officers' mess, Kings Royal Rifles, and the main guard-room the ventilation was much improved, and the whole drainage of the General Officer Commanding's house, which was in a very bad state, was relaid. The sanitary condition of the barracks generally was satisfactory. Owing to the damage done to the roofs of buildings by storms, a large amount of repairs was carried out. At the station hospital bath accommodation was supplied in the isolation block, and the "box" seats of the w.c.'s replaced by a "lift-up" pattern.

Cork Harbour.—At Queenstown, an isolation hospital for four beds, and scullery with hot and cold water were provided. Two enamel baths, with hot and cold water laid on, were fitted in the old bath room. The general sanitary condition is satisfactory. At Fort Carlisle three shelters with wash-house, cookhouse, and latrine, in connection with new battery on lower works, were completed. At Fort Camden the urinals in "A" block were connected with the main drain. Army Service Corps and canteen oil stores were erected. A hot and cold water supply was laid on to bath room. At Haulbowline, a bath room with hot and cold water was fitted, and the smith's shop was properly ventilated.

Fermoy.—At New Barracks the drainage (a combined system of storm and sewage) was completed. Four w.c.'s for officers were provided, and in several of the barrack rooms the old ceilings were renewed. At Old Barracks the floors and ceilings of several rooms were renewed, the ventilation of the farrier's shop improved, and a cooking apparatus renewed in the Royal Field Artillery kitchen. At the station hospital the floors of wards were stained and polished.

Kilkenny.—A meter house for the reception of the pipe water supply, on its introduction, was erected and pipes for same were laid down. In the station hospital a steward's room was re-appropriated as a patients' library.

Kinsale.—A storage tank for water and a slop sink have been added to No. 1 cookhouse. A school for adults, and ablution arrangements have been provided.

Limerick.—No improvements have been carried out in barracks. At the station hospital two orderlies' rooms were converted into bath rooms with hot and cold water, and two w.c.'s on the 1st and 2nd floors were reconstructed.

Templemore.—A door between Nos. 4 and 10 wards at the station hospital was provided for convenience of administration and as a safety exit in case of fire. Water was laid on to the surgery and a sink and poison cupboard added.

Tralee.—New quarters for the commanding officer were completed during the year.

Waterford.—In Royal Artillery barracks a new urinal was erected. In the infantry barracks increased bath accommodation was made and the drainage generally improved.

Youghal.—The urinals were fitted with constant acting flushing pipes. Hot and cold water has been laid on to bath in men's ablution rooms, and also to the bath in the station hospital.

Fethard.—A new pump, with storage tank, and a tank for rain-water were erected, and one urinal had a slate lining fitted. A new latrine and urinal at rear of stables was completed. At the hospital a drain was laid down.

Clogheen.—In the men's huts and married quarters partitions were fitted, ventilation carried out, and foundations concreted.

III.—ON THE HEALTH OF THE TROOPS SERVING IN GIBRALTAR.

Sickness and Mortality.

Gibraltar. The average strength of the warrant officers, non-commissioned officers and men serving in Gibraltar during the year was 4,689.

The troops stationed there throughout the year were Nos. 1, 49, 50, and 102 Companies, Royal Garrison Artillery, four companies of the Royal Engineers; the 1st Battalion Lancashire Fusiliers; the 2nd Battalion Loyal North Lancashire Regiment; the 2nd Battalion Royal Garrison Regiment; and detachments of the Army Service Corps, Royal Army Medical Corps, Army Ordnance Corps, Army Pay Corps and Garrison Staff.

The arrivals during the year consisted of Nos. 4, 5, and 6 Companies, Royal Garrison Artillery, all from England, in November, and the troops leaving the Command were No. 46 Company, Royal Garrison Artillery, to Sierra Leone, in November, and Nos. 99 and 100 Companies, Royal Garrison Artillery, to Malta, also in November.

The following table shows the admission, mortality and invaliding rates, &c., among the troops forming the garrison :—

1903 Average Strength.	Admissions.	Deaths.			Invalids.		Average constantly Sick.	Ratio per 1,000 of Strength.				
		In the Command.	Of Invalids.	Total.	Sent Home.	Finally Discharged.		Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
4,689	1,861	13	6	19	97	44	140·05	396·9	4·05	20·69	9·38	29·87

Comparing the ratios for the Command with those for the previous year and with the average ratios for the preceding ten years, the admission and constantly sick rates are higher in the former comparison by 82·0 and 3·60, but lower than in the latter by 263·4 and 17·26 respectively, while the death rate is lower in both comparisons by ·74 and ·06 respectively.

The average sick time to each soldier was 10·90 days, which is longer than in the previous year by 1·31 days, but shorter than the decennial average period by 6·30 days. The average duration of each case of sickness, 27·47 days, is shorter than in the previous year by 2·98 days, but longer than the average period by 1·42 days.

In Abstract XXXIV is a table showing these health statistics for the several regiments and corps which served at Gibraltar during the year. In the Royal Artillery (excluding those who were only a short period in the Command) the highest admission rate was 695·9 per 1,000, in No. 99 Company, and the lowest, 282·9 per 1,000, in No. 1 Company. The

highest rate of constant inefficiency through sickness was 52·87 per 1,000 in No. 99 Company, and the lowest 20·16 per 1,000 in No. 46 Company. In the previous year, No. 46 Company furnished the highest admission and constantly sick rates, while the lowest in both instances were in No. 81 Company. *Gibraltar.*

For the Royal Artillery, as a whole, the admission and constantly sick rates were 470·9 and 35·76 per 1,000, while the corresponding ratios for the Royal Engineers were 334·2 and 24·12 per 1,000 and for the Infantry 372·6 and 27·89 per 1,000.

The highest admission and constantly sick rates amongst the Infantry were 482·0 and 35·62 per 1,000, in the 1st Battalion Lancashire Fusiliers, and the lowest, 217·4 and 19·00, in the 2nd Battalion Royal Garrison Regiment.

The admission and constantly sick rates amongst the various Corps composing the Garrison Staff and Departments were comparatively low.

The sickness and mortality among the troops, arranged according to the ages of the men, are shown in the following table :—

Ages.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 20 years ..	514	326	—	9	634·2	—	17·51
From 20 to 25 years .	1,853	1,023	4	41	552·1	2·16	22·13
„ 25 „ 30 „ ..	855	237	1	21	277·2	1·17	24·56
„ 30 „ 35 „ ..	541	139	3	14	256·9	5·55	25·88
„ 35 „ 40 „ ..	735	101	5	7	137·4	6·80	9·52
Over 40 years.. ..	191	35	—	5	183·2	—	26·18
Total	4,689	1,861	13	97	396·9	2·77	20·69

With regard to the influence of service in the Command on sickness and mortality amongst the troops, the following table has been compiled :—

Length of Service in Command.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 1 year	3,289	1,331	10	53	404·7	3·04	16·11
From 1 to 2 years ..	964	464	2	35	481·3	2·07	36·31
„ 2 „ 3 „ ..	201	35	1	6	174·1	4·98	29·85
„ 3 „ 4 „ ..	58	11	—	2	189·7	—	34·48
„ 4 „ 5 „ ..	55	8	—	1	145·5	—	18·18
„ 5 „ 10 „ ..	116	10	—	—	86·2	—	—
Over 10 years.. ..	6	2	—	—	333·3	—	—
Total	4,689	1,861	13	97	396·9	2·77	20·69

In Abstract II is a table showing the principal statistics of sickness and mortality arranged according to the various sections of disease.

GENERAL DISEASES.—There were no admissions under the head of *eruptive fevers*, as compared with 4, representing a ratio of ·9 per 1,000 in the previous year. *Influenza* caused 5 admissions, equal to a ratio of 1·1 per 1,000, as against *nil* in 1902.

Enteric Fever caused 11 admissions with 2 deaths, equal to ratios of 2·3 and ·43 per 1,000, which are lower than the corresponding ratios in the

ibraltar. previous year by ·8 and ·44, and than the decennial average rates by 1·1 and and ·42 respectively. The admissions and deaths occurred in the following months, viz. :—

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Admissions ..	—	—	—	—	1	—	—	—	3	1	4	2	11
Deaths ..	—	—	—	—	—	—	—	—	—	1	—	1	2

Careful investigation as to the source of infection failed to indicate a common cause, and in no case was the specific origin of the disease assigned.

Simple Continued Fever.—There were 27 admissions under this head, equal to an admission ratio of 5·8 per 1,000, which is higher than the previous year's rate by 3·6.

Mediterranean Fever caused 9 admissions to hospital, or a ratio of 1·9 per 1,000, and it was one of the principal causes of invaliding during the year, 11 men having had to be sent home. There were also 4 cases and 1 death amongst the officers.

The admissions occurred in the following months :—

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Admissions ..	1	2	1	—	4	1	—	—	—	—	—	—	9

Dysentery caused 7 admissions, as compared with 2 in the previous year.

Malarial fevers were represented by 25 admissions, 24 of which were for ague, and 1 for remittent fever. The admission ratio, 5·3 per 1,000, is lower than the ratio in the preceding year by 13·6, and than the decennial average rate by 4·2. One death occurred from remittent fever.

Tubercular Diseases were the origin of 14 admissions and 4 deaths (2 of which occurred in invalids who had left the Command), equal to ratios of 3·0 and ·85 per 1,000, which show an increase on the previous year's rate of ·8 and ·41, and on the average for the preceding ten years of ·7 and ·21 respectively. All were cases of tubercular disease of the lungs.

Venereal Diseases.—Primary syphilis was the cause of 64 admissions, equal to a ratio of 13·6 per 1,000, as compared with 8·5 in 1902, and 11·2 the decennial average rate. If to this be added the sickness from soft chancre, for which there were 195 admissions and 17·84 men constantly sick, the total admission ratio for primary venereal sores amounts to 55·2 per 1,000, which shows an increase on the previous year's rate of 1·2, but is below the average for the preceding ten years by 38·3.

Secondary syphilis with 47 admissions furnished a ratio of 10·0 per 1,000, which is lower than the rate in 1902 by 2·8, and than the decennial average rate by 9·7. One death was recorded under this heading.

Gonorrhœa caused 305 admissions, or a ratio of 65·0 per 1,000, which is higher than the previous year's rate by 14·9, but lower than the average rate for the ten years 1893–1902 by 54·4.

Taking all forms of venereal disease together, the total admission ratio equalled 130·3 per 1,000, which is higher than the previous year's rate by 13·4, but lower than that of the decennial average by 102·3. The total ratio of constant inefficiency on account of these diseases was 12·48 per 1,000, which is below the rate for 1902, and the decennial period by ·22 and 10·22 respectively.* *Gibraltar.*

Parasitic Diseases.—There were 44 admissions under this head, comprising 41 cases of scabies, and 1 each of tænia solium, phthirius inguinalis, and ringworm. The admission ratio, 9·4 per 1,000, is higher than in the preceding year by 1·8, but lower than the average rate for the decennial period by 2·3.

For *alcoholism* there were 21 admissions, 1 of which was returned as delirium tremens. The ratio per 1,000, 4·5, is lower than the previous year's and decennial average rates by 1·2 and 2·0 respectively.

Rheumatism, with 58 admissions, gave a ratio of 12·4 per 1,000, which is higher than in 1902 by 2·8, but lower than the decennial average rate by 9·3. The admissions comprised 46 of rheumatism, 11 of rheumatic fever (1 fatal), and 1 of osteo-arthritis.

Debility caused 32 admissions, or a ratio of 6·8 per 1,000, which is higher than the previous year's and decennial average rates by 4·0 and 1·9 respectively.

Under the heading of *other general diseases* there were 11 admissions, 8 for non-malignant and 1 for malignant new growth, and 2 for anæmia. The ratio, 2·3 per 1,000, is lower than the previous year's rate by 1·8, and than the decennial average rate by 4·3. One death occurred from malignant new growth, and an invalid who had left the Command died from Hodgkin's disease.

Local Diseases.—*Diseases of the nervous system* caused 37 admissions, including 8 for mental disease, the equivalent ratio being 7·9 per 1,000, which shows an increase as compared with the previous year's rate of 1·0, but a decrease in comparison with the decennial average rate of 1·8. The cases included 13 of neuralgia, 5 of epilepsy, 4 each of melancholia and delusional insanity, 3 each of paralysis and nervous weakness, 2 each of inflammation of nerves and hemiplegia, and 1 of chorea.

Diseases of the Eye, with 28 admissions, furnished a ratio of 6·0 per 1,000, which is lower than the previous year's and the decennial average rates by 2·7 and 2·4 respectively. Fifteen of the cases were due to conjunctivitis.

Other Organs of Special Sense, accounted for 17 admissions, or a ratio of 3·8 per 1,000, which is higher than the rate in 1902 by 2·1, but lower than the decennial average rate by 4·4. The cases included 12 of inflammation of external meatus, 3 of perforation of membrana tympani, and 1 each of inflammation of middle ear and deafness.

Diseases of the Circulatory System. — Under this head there were 42 admissions recorded, equal to a ratio of 9·0 per 1,000, which is higher than the previous year's rate by 1·8, and than the decennial average rate by 2·5. The admissions were due to disordered action of heart 22, valvular disease of heart 11, varix 7, and dilatation of heart and aneurysm 1 case each. One death occurred out of hospital from fatty degeneration of the heart, and 2 deaths occurred in invalids who had left the Command, from valvular disease of heart and syncope respectively.

Diseases of the Respiratory System caused 97 admissions, equal to a ratio of 20·7 per 1,000, which shows an increase, as compared with the previous year's rate of 7·9, but a decrease in comparison with the decennial average

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* There were 5 admissions for ulcer of penis of non-venereal origin, with ·52 men constantly sick. If, as in former years (prior to 1897), these cases were included with those of primary syphilis and soft chancre under the heading of primary venereal sores, the admission and constantly sick rates for all venereal diseases would equal 131·4 and 12·59 respectively.

Gibraltar.

rate of 3·9. Bronchial affections caused 76 of the cases, pneumonia 8, and pleurisy 6. There was 1 death (an invalid) from empyema.

Diseases of the Digestive System furnished 208 admissions, or a ratio of 44·4 per 1,000, which is higher than in 1902 by 20·9, but lower than the average rate for the decennial period by 42·3. Among the cases were 99 for mouth and throat affections, 20 for hepatic diseases, 19 for indigestion, 17 for diarrhœa, 13 for hernia, and 10 for inflammation of stomach.

Diseases of the Lymphatic System caused 37 admissions, or a ratio of 7·9 per 1,000, which is lower than the previous year's and decennial average rates by 3·9 and 8·2 respectively. Inflammation of the glands accounted for 35 of the cases and suppuration for the remaining 2 cases.

Diseases of the Urinary System gave 11 admissions, equivalent to a ratio of 2·3, which shows a fractional decrease as compared with the rate for the previous year and the decennial period. The admissions were 4 for Bright's disease, 3 for incontinence of urine, 2 for hæmaturia, and 1 each for acute nephritis and inflammation of bladder.

Diseases of the Generative System, with 249 admissions or a ratio of 53·1 per 1,000, shows an increase as compared with the previous year's rate of 2·2, but a decrease in comparison with the decennial average ratio of 41·9. In addition to the 195 cases of soft chancre, already alluded to under the heading of venereal diseases, the admissions included 21 for orchitis, 13 for inflammation of glans penis, 9 for stricture of urethra, 5 for ulcer of penis, 3 for varicocele, and 1 each for urethritis, paraphimosis, and hydrocele.

Diseases of the Organs of Locomotion caused 29 admissions, or a ratio of 6·2 per 1,000, as compared with 3·9 in 1902, and 7·6, the decennial average rate. Twenty of the admissions were due to synovitis.

Diseases of the Connective Tissue were the cause of 65 admissions, equal to a ratio of 13·9 per 1,000, which is higher than in the preceding year by 2·4, but lower than the average rate for the ten years, 1893–1902, by 10·0. Thirty-seven of the cases were due to inflammation and 28 to abscess.

Diseases of the Skin furnished 89 admissions, or a ratio of 19·0 per 1,000, showing an increase on the previous year's rate of 5·5, but a decrease as compared the decennial average rate of 18·8. Eczema 23 cases, boils 21, psoriasis 9, whitlow 7, and onychia 6 cases, were the chief causes of admission.

INJURIES.—Under this head there were 248 admissions (all for *local injuries*), equal to a ratio 52·9 per 1,000, which is higher than the ratio for 1902 by 17·9, but lower than that of the decennial period by 36·7. Wounds, sprains, contusions, and fractures were the principal causes of admission. Of the 3 deaths recorded under local injuries, 2 were for wounds of neck and 1 for gunshot wound, and there was also a death from suffocation from strangulation, returned under general injuries. All these cases were suicidal, and a verdict of temporary insanity was returned in each instance. No motive could be assigned.

POISONS.—There was one admission on account of oxalic acid poisoning, caused by drinking a solution of the acid in mistake for water.

SURGICAL OPERATIONS.—The following were the principal operations, performed during the year:—Removal of cyst, amputation of finger, resection of rib on account of caries, radical cure for varicocele, and an operation on the male generative organs for non-malignant new growth.

INVALIDING.—The number of invalids sent home during the year was 97, equal to a ratio of 20·69 per 1,000, which is higher than the previous year's rate by 8·29, and than the decennial average ratio by 4·33.

In the Artillery the invaliding rate was 25·47 per 1,000, as compared with 10·52 in the previous year. Exclusive of the three companies which arrived at the end of the year, No. 99 Company, with 40·94 per 1,000, gave the highest rate, and No. 100 Company, with 16·13 per 1,000, the lowest rate. In the Royal Engineers the ratio was 4·88 per 1,000, and in the Infantry, with a ratio of 20·63 per 1,000, the highest rate was furnished by the

1st Battalion Lancashire Fusiliers, with 23·48 per 1,000, followed by the 2nd Battalion Royal Garrison Regiment with 23·05 per 1,000, and the 2nd Loyal North Lancashire Regiment with 15·06 per 1,000. *Gibraltar.*

As to the ages of the men invalided, 9, or 17·51 per 1,000, were under 20 years of age; 41, or 22·13 per 1,000, were between 20 and 25 years; 21, or 24·56 per 1,000, were between 25 and 30 years; 14, or 25·88 per 1,000, were between 30 and 35 years; and 12, or 12·96 per 1,000, were over 35 years of age. In the previous year the corresponding ratios were 10·00, 14·95, 12·07, 13·57, and 9·41 respectively. With regard to invaliding according to service in the Command, 53 men, or 16·11 per 1,000, were in their first year; 35, or 36·31 per 1,000, were in their second year; 6, or 29·85 per 1,000, were in their third year; and 3, or 12·77 per 1,000, had been more than three years in the Command. The corresponding rates in 1902 were 17·49, 7·85, 11·55, and 6·26 respectively.

The principal causes of invaliding were circulatory disorders (including 9 cases of valvular disease of heart) 18 cases, or 3·84 per 1,000 Mediterranean fever 11 cases, or 2·34 per 1,000, nervous diseases 11 cases, (including 4 cases of mental disorder) or 2·34 per 1,000, and tubercular disease of the lungs, secondary syphilis, rheumatism, and diseases of the eye, 6 cases each, or 1·28 per 1,000.

The number of men discharged the service as medically unfit, was 44, equal to a ratio of 9·38 per 1,000, which is lower than the previous year's and decennial average ratio by 1·72 and ·71 respectively. The chief causes of discharge were nervous diseases, 14 cases, (including 9 cases, or 1·92 per 1,000, for mental disease) or a ratio of 2·99 per 1,000, circulatory diseases 8 cases (including 3 cases each of valvular disease and disordered action of heart) or 1·71 per 1,000, tubercular diseases 6 cases (5 due to tubercle of lung), or 1·28 per 1,000, and secondary syphilis and local injuries 4 cases each, or ·85 per 1,000.

OFFICERS.—There was an average strength of 151 officers, among whom there were 81 admissions and 1 death, equal to ratios of 536·4 and 6·62 per 1,000, as compared with 401·6 and *nil* in the preceding year. Among the cases treated were, 20 for digestive disorders, 11 for injuries, 9 for influenza, 6 for bronchitis, 5 for rheumatism, 4 for Mediterranean fever and 2 for enteric fever. The death was due to Mediterranean fever and 4 officers were invalided on account of influenza, enteric fever, hemiplegia and myalgia.

WOMEN.—The average strength was 354, and there were 183 cases of sickness and 3 deaths, equal to ratios of 516·9 and 8·47 per 1,000, respectively, which in comparison with the previous year's rates show an increase of 286·4 in the former, and 5·48 in the latter. The chief causes of sickness were, debility 30 cases, digestive disorders 26 cases, respiratory diseases 15, neuralgia 14, and there were also 23 cases of diseases incidental to women. The deaths were due to inflammation of brain, angina pectoris, and syncope.

CHILDREN.—The average strength was 622, with 322 admissions and 7 deaths, the equivalent ratios being 517·7 and 11·25 per 1,000, which, compared with the ratios in the previous year show an increase of 195·7 in the former, but a decrease of 21·11 in the latter. Among the cases were 86 of respiratory affections, 66 of digestive disorders, 21 of simple continued fever, 18 of debility, 12 of chicken-pox, and 11 each of cow-pox, whooping-cough and mumps. The deaths were 2 from enteritis, and 1 each from tubercle, debility, pneumonia, diarrhœa, and contusion.

VACCINATION.—All the vaccinations during the year were carried out with lymph from the Army Vaccine Institute, Aldershot. There were 11 re-vaccinations among men with 5 failures. There were no vaccinations among the women, and of 64 primary vaccinations among the children, failure resulted in 15 instances.

SANITARY CONDITIONS.

Gibraltar. The Principal Medical Officer (Colonel J. McNamara, M.D., R.A.M.C.) reports that the health of the troops has been good and that the sanitation is being carefully attended to.

The following are the principal points noted in connection with the sanitary reports of districts:—

At South Barracks, w.c. accommodation has been provided for the Quartermaster's quarters. At North Jumper's Bastion and Warrant Officer's quarters, Rosia, the surface channels have been repaired. Soil drainage pipes have been taken up and renewed in No. 38 Field Officers' quarters, and a lavatory with basins fitted with taps has been provided at the adult school, Buena Vista. Manhole covers to drains have been provided at Windmill Hill, and the women's wash-house near Europa, and a new surface gutter laid from Bombproof Barracks to Europa. Earth closets have been provided at Signal Station and Signal Hill Battery. Four huts have been built at married quarters, Lower Bruce's Farm. The ventilation at the abattoir at North Front has been improved. The floors of the guard-houses at N.E. Front and Devil's Tower have been concreted, and an officer's w.c. fixed near the orderly room at Casemates Barracks. Several improvements in connection with the general drainage system have been carried out and the drainage at Orange Bastion has been re-laid.

IV.—ON THE HEALTH OF THE TROOPS SERVING IN THE MALTA COMMAND.

SICKNESS AND MORTALITY.

I.—BRITISH TROOPS.

Malta.

The average strength of the troops serving in the Malta Command (excluding the Royal Malta Artillery) was 9,313, including the force detached for service in Crete, the average annual strength of which was 410.

The units serving throughout the year were Nos. 48, 63, 77, 81, 92, 93, and 96 Companies, Royal Garrison Artillery, Nos. 24, 28 and 31 Companies, and Supernumerary Staff, Royal Engineers, the 2nd Battalion King's Own Yorkshire Light Infantry, the 1st Battalion King's Royal Rifle Corps, the 2nd Battalion Cameron Highlanders, the 1st Battalion Royal Dublin Fusiliers, the 1st, 3rd, and 4th Battalions Royal Garrison Regiment, No. 70 Company Army Service Corps, No. 21 Company Army Ordnance Corps, and detachments of the Royal Army Medical Corps, Army Pay Corps, and Garrison Staff.

Taking the Command as a whole, the arrivals consisted of Nos. 99 and 100 Companies, Royal Garrison Artillery, from Gibraltar, in November, and the 2nd Battalion Hampshire Regiment, from England, in September.

The troops leaving the Command were Nos. 44 and 95 Companies, Royal Garrison Artillery, for the United Kingdom and Bermuda respectively, in November, and the 1st Battalion King's Own Royal Lancaster Regiment, for Bombay, in September.

In the following table are shown the admission, mortality, invaliding rates, &c., among the troops in the whole Command, and also separate statistics for those serving in Crete :—

1903.	Average Strength.	Admissions.	Deaths.			Invalids.	
			In the Command.	Of Invalids.	Total.	Sent Home.	Finally discharged.
Malta and Gozo	8,903	5,272	53	5	59	390	154
Crete	410	510	1				
Total ..	9,313	5,782	54	5	59	290	154

Malta. (*continued*)

1903.	Average constantly Sick.	Ratio per 1,000 of Strength.				
		Admissions.	Deaths.	Invalids sent Home.	Invalids finally discharged.	Constantly Sick.
Malta and Gozo.. ..	397·90	592·2	6·84	41·88	16·54	44·69
Crete	24·38	1243·9				59·46
Total ..	422·28	620·9	6·84	41·88	16·54	45·34

Comparing the statistics of the whole Command with those for the previous year, it is found that the admission rate is lower by 82·4, and the mortality and constantly sick ratios higher by ·05 and 2·09 respectively, while in comparison with the average rates for the ten years 1893–1902, they show decreases of 215·5, 2·03 and 4·78 respectively.

The average sick time to each soldier, 16·55 days, is longer than in the previous year by ·76 of a day, but shorter than the average for the decennial period by 1·75 days, while the average duration of each case of sickness is longer in both these comparisons by 4·21 and 4·79 days respectively.

If the figures relating to Crete, as given in the foregoing table, are eliminated, the admission and constantly sick rates for Malta and Gozo are higher than in 1902 by 4·7 and 5·36 respectively. Taking Crete alone, the admission and constantly sick rates show a decrease, as compared with the previous year, of 1664·8 and 58·52 respectively.

In Abstract No. XXXIV is a table showing the health statistics for the several regiments and corps which served in the Command during the year. In the Royal Garrison Artillery, the admission, mortality, and constantly sick rates were 420·6, 4·08, and 32·79 per 1,000, as compared with 438·0, 5·56, and 34·26 in 1902. Excluding companies of small average strength, the highest admission rate was 580·3 per 1,000 in No. 95 Company, stationed at St. Elmo, until it left for Bermuda in November, the next highest being 534·2 per 1,000 in No. 92 Company, stationed at Tigné. The lowest rate was 282·4 per 1,000 in No. 96 Company, the next lowest being 287·7 per 1,000, in No. 81 Company, both stationed at Ricasoli. The constantly sick rate was highest, 48·73 per 1,000, in No. 44 Company, followed by 38·29 per 1,000 in No. 92 Company, the lowest rates being in Nos. 96 and 81 Companies, with 23·52 and 26·67 per 1,000, respectively.

In the Royal Engineers, the admission, mortality and constantly sick rates were 247·4, 2·63, and 15·42 per 1,000 respectively, as compared with 493·2, 10·20, and 24·97 in 1902.

In the Infantry the admission rate was 710·7, the death rate 7·36, and the constantly sick rate 51·55 per 1,000, as compared with 804·7, 6·34, and 47·38 in the previous year. Among battalions the highest rate was 1,193·0 per 1,000 in the 1st Battalion King's Royal Rifle Corps, quartered at Floriana, followed by 954·0 per 1,000 in the 1st Battalion Royal Dublin Fusiliers, which was stationed in Crete during a portion of the year. The lowest rate was 360·4 per 1,000 in the 4th Battalion Royal Garrison Regiment, stationed at Imtarfa and Verdala, the next lowest being 416·8 per 1,000 in the 1st Battalion Royal Garrison Regiment, quartered at Verdala and Lower St. Elmo. The highest death rates were 12·38 and 12·06 per 1,000 in the 4th and 3rd Battalions Royal Garrison Regiment. The lowest rate was 2·22 per 1,000 in the 2nd Battalion Cameron Highlanders, followed by 3·12 per 1,000 in the 2nd Battalion King's Own Yorkshire Light Infantry and 3·73 per 1,000 in the 1st Battalion Royal Dublin Fusiliers. The highest rates of constant inefficiency were 101·52 and 57·52 per 1,000, in the 1st Battalion King's Royal Rifle Corps and the 1st Battalion Royal

Dublin Fusiliers respectively, the two lowest ratios being 34·78 and 36·05 per 1,000 in the 1st and 3rd Battalions Royal Garrison Regiment. *Malta.*

The sickness and mortality among the troops, arranged according to the ages of the men, are shown in the following table :—

Ages.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 20 years ..	1,070	737	6	52	688·8	5·61	48·60
From 20 to 25 years	3,704	3,014	11	156	813·7	2·97	42·12
„ 25 „ 30 „	1,604	825	9	58	514·3	5·61	36·16
„ 30 „ 35 „	1,169	451	6	43	385·8	5·13	36·78
„ 35 „ 40 „	1,366	585	19	52	429·0	13·91	38·07
Over 40 years ..	400	169	3	29	422·5	7·50	72·50
Total ..	9,313	5,782	54	390	620·9	5·80	41·88

With regard to the influence of service in the Command on sickness and mortality amongst the troops, the following table has been compiled :—

Length of Service in Command.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 1 year ..	4,967	4,113	24	198	828·7	4·83	39·86
From 1 to 2 years ..	3,208	1,281	22	128	399·3	6·86	39·90
„ 2 „ 3 „ ..	577	199	3	25	344·9	5·20	43·33
„ 3 „ 4 „ ..	261	90	1	14	344·8	3·83	53·64
„ 4 „ 5 „ ..	175	44	2	11	251·4	11·43	62·86
„ 5 „ 10 „ ..	105	50	1	13	476·2	9·52	123·81
Over 10 years ..	20	2	1	1	100·0	50·00	50·00
Total ..	9,313	5,782	54	390	620·9	5·80	41·88

In Abstract III will be found the statistics of sickness, mortality, &c., arranged according to the different sections of disease.

General Diseases.—*Eruptive fevers* were represented by 3 admissions for measles and 6 for scarlet fever. All were of a mild type, and made an uninterrupted recovery. There were 49 cases of *influenza*, as compared with 19 in the previous year, and *diphtheria* caused 1 admission, as against 2 in 1902.

Enteric Fever.—Under this head there were 20 admissions and 8 deaths (the latter including an invalid who had left the Command), all of which, with the exception of 2 cases in Crete, occurred in Malta and Gozo. The admission rate for the Command, 2·1 per 1,000, is lower than in 1902 by 2·1 and than the decennial average rate by 5·4, while the mortality ratio, ·86 per 1,000, is higher than in the previous year by ·43, but lower than the average rate by 1·61.

Taking Malta and Gozo alone, the admission rate was 2·02 per 1,000, as compared with 4·3 in the previous year, and with 5·8 the decennial average rate; while the death rate was ·90 per 1,000, as against ·46 and 1·96 in the

Malta.

two comparisons. In Crete the admission rate was 4·9 per 1,000, and the death rate *nil*, as against 2·2 and *nil* in the previous year.

The percentage of mortality to attack was 40·0, as compared with 10·3 in the previous year, and 32·8 the average percentage for the preceding ten years. Of the men attacked, 6 were under 20 years of age, 4 were in their 21st year, 1 was in his 22nd year, 2 in their 23rd year, 1 in his 24th year, 1 in his 25th year, and 5 were 25 years of age and upwards. As to total service, 3 had less than 1 year, 4 were in their 2nd year, 3 in their 3rd year, 5 in their 4th year, and 5 had 5 years' service and upwards; 15 had been less than 1 year in the Command, 3 were in their 2nd year, and 1 each in their 3rd and 4th year of service in the Command respectively.

Of the 20 cases which occurred, 5 were treated in Valletta, 5 in Citta Vecchia, 4 in Cottonera, 3 in Forrest, 2 in Kandia, Crete, and 1 in Imtarfa. In each case a thorough investigation was made, but no cause could be definitely fixed. In no instance was the origin considered attributable to sanitary defects in barracks. Some of the cases may probably have been contracted in insanitary public-houses, and steps have been taken to mitigate this evil, by having certain houses, which have been reported by the civil authorities as insanitary, placed "out of bounds" to all troops.

The following table shows the seasonal prevalence of enteric fever:—

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Malta & Gozo.													
Admissions..	3	—	2	—	1	—	3	3	1	—	3	2	18
Deaths ..	4	—	—	1	—	—	—	—	—	—	—	2	7
Crete.													
Admissions..	—	—	2	—	—	—	—	—	—	—	—	—	2
Deaths ..	—	—	—	—	—	—	—	—	—	—	—	—	—

Simple continued fever caused 786 admissions, giving an admission ratio of 84·4 per 1,000, which was lower than in 1902 by 27·2.

Mediterranean fever caused 404 admissions with 9 deaths, giving admission and death ratios of 43·4 and ·97 per 1,000 respectively, as compared with 16·8 and ·65 in 1902; and 133 of the cases had to be invalided. Amongst the officers 54 cases occurred, 21 of whom afterwards required invaliding. There were 70 cases amongst the women with 1 death, and 33 cases amongst the children, also with 1 death. The disease also caused 7 admissions amongst the men of the Royal Malta Artillery. The Principal Medical Officer notes that the incidence of the disease "was much in excess of previous years, and was principally due to the unusual prevalence of this fever amongst the 1st Battalion, King's Royal Rifle Corps, quartered at Floriana Barracks." He further reports that the married families suffered unduly, that persons living in newly-built quarters suffered severely, and that the troops under canvas at Ghain Tuffieha had a good many cases. No special cause in any of the cases could be ascertained. It is noticeable that among the civil population the returns for Mediterranean fever show a decrease for 1903, compared with the two preceding years.

The following tables show, as far as possible, the influence of age and service in Malta on the incidence of Mediterranean fever:—

Age.	Average Strength.	Admissions.	Deaths.	Invalids sent home.	Ratios per 1,000 of Strength.		
					Admissions.	Deaths.	Invalids sent home.
Under 20 years	1,070	67	3	26	62·6	2·80	24·30
From 20 to 25 years ..	3,704	196	1	50	52·9	·27	13·50
„ 25 „ 30 „ ..	1,604	53	1	21	33·0	·62	13·09
„ 30 „ 35 „ ..	1,169	34	2	15	29·1	1·71	12·83
„ 35 „ 40 „ ..	1,366	37	1	14	27·1	·73	10·25
„ 40 and upwards ..	400	17	1	7	42·5	2·50	17·50
Total ..	9,313	404	9	133	43·4	·97	14·28

Length of Service in Malta.	Average Strength.	Admissions.	Deaths.	Invalids sent home.	Ratios per 1,000 of Strength.		
					Admissions.	Deaths.	Invalids sent home.
Under 1 year	4,967	261	2	94	52·6	·40	18 92
1 to 2 years	3,208	117	5	31	36 5	1·56	9·66
2 „ 3 „	577	16	2	3	27·7	3·47	5·20
3 „ 4 „	261	6	—	3	23·0	—	11·49
4 „ 5 „	175	—	—	1	—	—	5·71
5 „ 10 „	105	4	—	1	38·1	—	9·52
10 years and upwards ..	20	—	—	—	—	—	—
Total ..	9,313	404	9	133	43·4	·97	14·28

The following table shows the seasonal prevalence of Mediterranean fever :—

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Admissions ..	18	14	15	6	16	18	24	77	87	65	33	31	404
Deaths ..	—	1	1	1	—	1	1	—	2	2	—	—	9

Dysentery **caused 15 admissions, or a ratio of 1·6 per 1,000, as compared with 1·7 in the previous year, and 6·6 the decennial average rate. One death occurred.**

Malarial Fevers **caused 345 admissions, equivalent to a ratio of 37·0 per 1,000, which is lower than in the previous year by 80·4, and than the**

Malta. decennial average ratio by 31·9. No death occurred. Of the cases, 336 were returned as ague, and 9 as remittent fever. Malarial fever was again prevalent in Crete (causing 222 admissions, 8 of which were due to remittent fever), regarding which the Senior Medical Officer notes that the mildness of the epidemic, as compared with previous years, was mainly due to the stringent measures adopted to destroy, as far as possible, all means of infection by mosquitoes.

The following table shows the admissions for malarial fever by months:—

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Malta and Gozo	3	—	17	20	26	26	11	4	4	4	4	4	123
Crete	30	34	2	—	2	17	34	47	15	22	10	9	222

Under the heading of *septic diseases* there were 6 admissions for erysipelas, all of which recovered.

Tubercular Diseases furnished 26 admissions and 4 deaths (1 of the latter occurring in an invalid who had left the Command), all of which, with the exception of 2 cases of tubercle of leg, were returned as tubercle of the lungs. The admission rate, 2·8 per 1,000, was lower than the previous year's rate by 1·0 but was identical with the average rate for the ten years 1893–1902, while the mortality rate, ·43 per 1,000, was lower in both comparisons by ·44 and ·43 respectively. All the cases were treated as far as possible by the open-air method, with satisfactory results.

Venereal Diseases.—There were 73 admissions for *primary syphilis*, or a ratio of 7·8 per 1,000, which is higher than the previous year's rate by 1·8, but lower than the average rate by 12·0. If to this be added the sickness from soft chancre, for which there were 121 admissions and 7·85 men constantly sick, the total admission rate for primary venereal sores equalled 20·8 per 1,000, as compared with 23·3 in 1902, and with 39·7 the decennial average ratio. The constantly sick rate was 1·66 per 1,000, as against 2·12 and 3·57 in the two comparisons. *Secondary syphilis* caused 155 admissions, equal to a ratio of 16·6 per 1,000, which is higher than the rate in the previous year and the ten years' average rate by 6·0 and 1·1 per 1,000 respectively. The constantly sick rate, 2·11 per 1,000, was also higher in the two comparisons by ·81 and ·37 respectively. One death occurred. *Gonorrhœa*, with 635 admissions, gave a ratio of 68·2 per 1,000, which is higher than in 1902 by 14·5, but lower than the average rate by 11·2. The constantly sick rate was 5·70 per 1,000, as compared with 3·87 in the previous year, and with 6·20 the decennial average rate. Taking all forms together, the total admission ratio for venereal disease was 105·7 per 1,000 which is higher than that for the previous year by 18·0, but lower than the average rate for the ten years 1893–1902 by 28·9, while the constantly sick rate, 9·47 per 1,000, is higher than in 1902 by 2·18, but lower than the average rate by 2·04.*

In Crete there were 2 admissions for primary syphilis, 4 for secondary syphilis, 8 for soft chancre, and 46 for gonorrhœa. The total admission

* There were 5 admissions for ulcer of penis of non-venereal origin, with ·41 men constantly sick. If, as in former years (prior to 1897), these cases were included with those of primary syphilis and soft chancre under the head of primary venereal sores, the admission and constantly sick rates for all forms of venereal diseases would equal 106·2 and 9·52 respectively.

rate for all forms of venereal disease was 146·3 per 1,000, and there were 5·35 men constantly sick from these affections, the ratio being 13·05 per 1,000. *Malta.*

For *parasitic diseases* there were 103 admissions, the ratio, 11·1 per 1,000, being fractionally higher than the previous year's rate but lower than the decennial average rate by 3·6. Among the admissions were 71 cases of scabies, 12 of phthirius inguinalis, 10 of ringworm, 8 of tænia solium, and 1 each of ascaris lumbricoides and bilharzia hæmatobia.

Alcoholism caused 38 admissions and 3 deaths, or ratios of 4·1 and ·32 per 1,000 respectively, as compared with 4·8 and ·22 in the previous year, and 3·0 and ·08 the average rates. There was one admission, a fatal one, returned as delirium tremens. The Principal Medical Officer again notes that the increase in this disease is principally due to the sale of very cheap liquor in the numerous grog-shops which abound in the island.

Under the heading of *rheumatism* there were 83 admissions recorded, including 5 for gout, 4 for rheumatic fever, and 1 for osteoarthritis, equivalent to a ratio of 8·9 per 1,000, which is lower than in 1902 by 4·4 and than the decennial average rate by 11·8.

Under *debility* 87 admissions are recorded, the ratio, 9·3 per 1,000, being lower than the previous year's and decennial average rates by 2·2 and ·7 respectively.

There were 61 admissions, and 3 deaths (including 1 in an invalid who had left the command), under the heading of *other general diseases* equal to ratios of 6·6 and ·32 per 1,000 respectively, as compared with 8·4 and ·22 in the previous year. The admissions comprised 29 for anæmia, 18 for non-malignant new growth, 9 for cyst, 2 for malignant new growth (carcinoma), 2 for diabetes mellitus, and 1 for diabetes insipidus. The deaths were due to malignant new growth (carcinoma).

Local Diseases.—*Diseases of the Nervous System* were the cause of 73 admissions, the equivalent ratio being 7·8 per 1,000, which is lower than in the previous year by 2·6, and also lower than the average rate for the decennial period by ·7. Among the cases were 18, or 1·9 per 1,000, of mental affection, the remainder including 22 of neuralgia, 7 of headache, 5 each of degeneration of spinal cord and epilepsy, 4 of nervous weakness, 3 each of inflammation of nerves and vertigo, 2 each of hemiplegia and local paralysis, and 1 each of disseminated scelerosis and apoplexy. The mental diseases comprised 6 of dementia, 5 of melancholia 3 of mania, 3 of mental stupor, and 1 of general paralysis of the insane. There was no death in the Command, but an invalid who had been sent to the United Kingdom died from softening of brain.

Diseases of the Eye furnished 117 admissions, or a ratio of 12·6 per 1,000, which is lower than in 1902 by ·4, and is fractionally higher (·1) than the average rate for the ten years 1893–1902. Amongst the admissions there were 51 of conjunctivitis, 25 of ametropia, 11 of blepharitis, 8 of ulceration of cornea, and 7 of iritis.

Diseases of other Organs of Special Sense gave a ratio of 9·0 per 1,000, as compared with 8·8 in the previous year and 12·5, the decennial average ratio. Of the 84 admissions, 50 were due to inflammation of the external meatus, 13 each to inflammation of the middle ear and perforation of membrana tympani, 6 to epistaxis, and 1 each to deafness and inflammation of the accessory sinuses.

Diseases of the Circulatory System caused 109 admissions, equal to a ratio of 11·7 per 1,000, which is lower than the rate in the previous year by ·9 but higher than the decennial average rate by 3·0. Six deaths occurred, the ratio of mortality, ·64 per 1,000, being higher than in 1902 and than the average rate for the preceding ten years by ·10 and ·32. Among the cases treated were 66 of disordered action of heart, 25 of valvular disease of heart, and 10 of varix. The deaths were 4 from valvular disease of heart (1 out of hospital), 1 from aneurysm (out of hospital), and 1 from thrombosis.

Diseases of the Respiratory System.—There were 150 admissions under this heading, the equivalent ratio, 16·1 per 1,000, being higher than the rate in

Malta.

1901 by ·3, but lower than the average rate by 5·0. There were 4 deaths, or ratio of ·43, which is lower in the two comparisons by ·11 and ·06 respectively. Bronchitic affections caused 108 admissions, and among the remainder were 16 cases of pneumonia, 9 of pleurisy, 4 of spasmodic asthma, and 3 of emphysema. The deaths were 2 from pneumonia (1 of which, in a man on the strength of the Malta Command, occurred at Gibraltar), 1 from congestion of lung, and 1 from phthisis.

Diseases of the Digestive System were the cause of 571 admissions and 4 deaths (the latter including an invalid who had left the Command), equal to ratios of 61·3 and ·43 per 1,000, which are lower than in the previous year by 13·3 and ·33 respectively, and also lower than the average rate for the ten preceding years by 37·5 and ·07 respectively. The principal causes of admission were diseases of the mouth and throat 213 cases, indigestion 115, hepatic affections 59 (including 35 of jaundice and 14 of congestion of liver), diarrhœa 48, colic 44, piles 28, and hernia 24 cases. Forty-four of the admissions for digestive disorders occurred in Crete, and included 17 cases of indigestion, 12 of diseases of the mouth and throat, and 6 of colic. The deaths were 2 from abscess of liver, 1 (an invalid) from inflammation of liver, and 1 from internal strangulation of intestines.

Diseases of the Lymphatic System were the cause of 41 admissions, equivalent to a ratio of 4·4 per 1,000, as compared with 4·1 in the previous year, and and 8·1 the decennial average rate. Of the admissions 35 were due to inflammation or suppuration of the lymphatic glands.

For *diseases of the urinary system* there were 12 admissions, or a ratio of 1·3 per 1,000, which is lower than the previous year's and decennial average rates by ·8 and ·3 respectively. The causes of admission were incontinence of urine 5 cases, hæmaturia 2 cases, and Bright's disease, abscess of kidney, pyelitis, albuminuria, and inflammation of bladder 1 case each.

Diseases of the Generative System furnished 247 admissions, or a ratio of 26·5 per 1,000, which is lower than in 1902 by 1·3, and than the average rate for the ten years 1893–1902 by 9·8. In addition to the 121 cases of soft chancre already referred to under the heading of venereal diseases, the admissions included 62 for balanitis, 29 for orchitis, 14 for stricture of urethra, 6 for hydrocele, 5 for ulcer of penis, 4 each for phimosis and paraphimosis, and 1 each for urethritis and inflammation of tunica vaginalis.

Diseases of the Organs of Locomotion gave a ratio of 12·1 per 1,000, which is practically the same as in the previous year, but is higher than the decennial average rate by 3·0. Synovitis 72 cases, and myalgia 17 cases, furnished the majority of the admissions.

For *diseases of the connective tissue* there were 235 admissions, or a ratio of 25·2 per 1,000, as compared with 22·6 in 1902, and with 34·0 the average rate. The admissions comprised 119 cases of inflammation and 116 of abscess of the connective tissue.

Diseases of the Skin caused 320 admissions, equal to a ratio of 34·4 per 1,000, which is lower than in the previous year by 2·1, and than the decennial average rate by 21·1. The chief causes of admission were eczema 106 cases, boils 104, ulcers 29, psoriasis 15, and whitlow and onychia 11 cases each.

INJURIES.—There were 763 admissions and 14 deaths, equal to a ratio of 81·9 and 1·51 per 1,000, the former being higher than in 1902 by 4·8, but lower than the ten years' average rate by 9·7, while the latter is higher in both comparisons by ·10 and ·08 respectively.

For *general injuries* there were 11 admissions, comprising 6 for multiple injury, 4 for sun-stroke, and 1 for suffocation from plugging of air passages with foreign substances. Five deaths are recorded, viz., 3 from suffocation from submersion, 1 from multiple injuries, sustained by accidentally falling over a rock while returning to camp at night; and 1 from suffocation from plugging of the air passages with food while in a state of stupor caused by alcoholic excess.

There were 752 admissions for *local injuries*, chiefly due to wounds, strains or sprains, contusions and fractures. Under this heading 9 deaths

were recorded, viz. :—3 from gunshot wound of skull (two suicidal and one the result of an accident while carrying out field practices); 2 from compression of brain, caused by falls; 1 from contusion of brain, in which the man was found on the ramparts at Floriana Barracks; 1 from fracture of skull (suicidal), in which the man threw himself out of a window in Forrest Hospital while detained; 1 from contusion of abdomen, caused by a kick from a horse; and 1 (suicidal) from cut throat. In none of the suicidal cases could any motive be assigned.

POISONS.—Under this heading 3 admissions are recorded from decayed and poisonous food, one of which terminated fatally.

SURGICAL OPERATIONS.—The more important surgical operations comprised :—operation on cysts (1); evacuations of abscess (3); operations on the lymphatic organs (3); operations on bones (2); reduction of dislocation of foot (1); amputations (6), four of fingers and two of toes; operations on the eye (3), two of excision and one of evisceration; on the thorax and breast (3), two for pleurisy and one for empyema; on the abdomen (7), two each on account of inflammation of intestines, abscess of liver and hernia, and one of nephrotomy in a case of abscess of kidney; on the rectum and anus (3), for fistula; and operations on the male generative organs (6), all on account of phimosis. A death occurred after an operation for fistula in ano, the patient dying from Mediterranean fever, which had supervened. Chloroform was the anæsthetic used in 34 instances, chloroform and ether in 2, A.C.E. mixture in 1, and in the remaining instance, an operation for suppuration of the lymphatic glands, a local anæsthetic was used.

INVALIDING.—The number of men invalided home during the year was 390, the equivalent ratio being 41·88 per 1,000, as compared with 27·34 in 1902, and 30·83, the average rate for the ten years 1893–1902.

In the Artillery the invaliding rate was 32·16 per 1,000, as compared with 28·33 in the previous year. The highest ratio 78·79 per 1,000, occurred in No. 44 Company, and the lowest, 9·57, in No. 77 Company. The Royal Engineers gave a ratio of 26·32 per 1,000, which is higher than the previous year's rate by 2·51. In the Infantry the ratio was 45·69 per 1,000, as compared with 27·04 in 1902, the ratios of the several battalions ranging from 116·50 per 1,000 in the 1st Battalion King's Royal Rifle Corps to 14·93 in the 1st Battalion Royal Dublin Fusiliers.

Taking the ages of the men sent home, it is found that 52, or 48·60 per 1,000, were under 20 years of age; 156, or 42·12 per 1,000, were between 20 and 25; 58, or 36·16 per 1,000, were between 25 and 30; and 124 or or 42·25 per 1,000, were over 30 years of age. In the previous year the corresponding ratios were 17·44, 21·10, 22·34, and 38·83. As to length of service in the Command, 198 of those invalided, or 39·86 per 1,000, were in their first year of service; 128, or 39·90 per 1,000, were in their second year; 25, or 43·33 per 1,000 were in their third year; 14, or 53·64 per 1,000, were in their fourth year; and 25, or 83·34 per 1,000, had been more than four years in the Command; the corresponding rates in the previous year were 34·45, 11·49, 22·67, 34·55, and 23·29 per 1,000 respectively.

The chief causes of invaliding were :—Mediterranean fever 133 cases, or 14·28 per 1,000, an increase of 10·38 as compared with 1902; diseases of the circulatory system 51 cases (including 28 of disordered action and 19 of valvular disease of the heart), or 5·48 per 1,000, an increase of ·71; diseases of the nervous system 32 cases, or 3·44 per 1,000 (including 19 cases, or 2·04 per 1,000, of mental disorder), a decrease of ·24 : debility 26 cases, or 2·79 per 1,000, an increase of ·62; tubercular diseases 19 cases (all for tubercle of lungs), or 2·04 per 1,000, a decrease of 1·21; diseases of the eye 18 cases, or 1·93 per 1,000, an increase of ·95; injuries 15 cases, or 1·61 per 1,000, a decrease of ·13; diseases of other organs of special sense and of the digestive system 13 cases each, or 1·40 per 1,000, an increase of ·42 and ·64 respectively; diseases of the organs of locomotion 12 cases, or 1·29 per 1,000, an increase of ·53; and secondary syphilis 11 cases, or 1·18 per 1,000, an increase of ·64 as compared with 1902.

Malta.

There were 154 men discharged the service as medically unfit, the ratio being 16·54 per 1,000, which is higher than that for the preceding year by 2·33, and than the average rate for the preceding ten years by 4·93. The principal causes of discharge were:—diseases of the circulatory system 35 cases (including 20 of valvular disease and 14 of disordered action of the heart), or 3·76 per 1,000, an increase of ·18 as compared with the previous year; diseases of the nervous system 24 cases, or 2·58 per 1,000, a decrease of 1·00 (16 cases, or 1·72 per 1,000, being due to mental disease); tubercular disease of the lungs 12 cases, or 1·29 per 1,000, a decrease of 1·21; diseases of the organs of locomotion 11 cases, or 1·18 per 1,000, an increase of ·85; diseases of other organs of special sense 10 cases, or 1·07 per 1,000, an increase of ·42; debility, diseases of the eye, and injuries 9 cases each, or ·97 per 1,000, as compared with ·43, ·54, and ·54 respectively in 1902; and Mediterranean fever 7 cases, or ·75 per 1,000, as against ·54 in the previous year.

OFFICERS.—The average strength was 266, and there were 243 cases of sickness, and 29 of invaliding, the equivalent ratios being 913·5, and 109·02 per 1,000, as compared with 992·1 and 125·98 in the preceding year. There was no death recorded. Among the cases treated were 62 of simple continued fever, 54 of Mediterranean fever, 34 of digestive disorders, and 19 of injuries. The causes of invaliding were Mediterranean fever 21 cases, and simple continued fever, debility, inflammation of stomach, indigestion, inflammation of liver, calculus in kidney, nephralgia, and concussion of brain 1 case each.

WOMEN.—There were 417 admissions and 4 deaths in an average strength of 609, the equivalent ratios being 684·7 and 6·57 per 1,000, which are lower than the ratios in the preceding year by 182·8 and 9·76 respectively. The cases included 70 of Mediterranean fever, 63 of debility, 37 of simple continued fever, 24 of indigestion, 17 of rheumatism, 17 of diarrhœa, 11 of bronchitis, 10 of anæmia, and 51 cases of diseases incidental to women. There were also 4 cases of dysentery and 3 of enteric fever. One case of small-pox occurred in a woman living outside barracks at Sliema, at a time when there were several cases among the civil population. The case was treated in the Government Lazaretto. The deaths were due to enteric fever, Mediterranean fever, valvular disease of heart, and inflammation of liver.

CHILDREN.—In an average strength of 1,206, there were 966 admissions and 53 deaths, equal to ratios of 801·0 and 43·95 per 1,000, as compared with 775·1 and 41·07 in 1902. Among the cases treated were 191 of measles, 159 of bronchitis, 66 of diarrhœa, 62 of simple continued fever, 56 of debility, 54 of inflammation of intestines, 45 of tonsillitis, 34 of whooping cough, and 33 of Mediterranean fever. There were also 12 cases of chicken-pox 7 of enteric fever, and 3 each of diphtheria and dysentery. One case of small-pox occurred, in a child of the woman referred to above. The deaths were 20 from inflammation of intestines, 8 from eclampsia, 4 from debility, 3 each from broncho-pneumonia and diarrhœa, 2 each from whooping cough, immaturity at birth, bronchitis, and disorders of dentition, and 1 each from diphtheria, Mediterranean fever, rickets, congestion of lung, tonsillitis, hernia, and still birth.

VACCINATION.—One re-vaccination amongst recruits resulted in failure, 1 primary vaccination amongst soldiers other than recruits also resulted in failure, and 166 re-vaccinations gave 65 perfect results, 54 modified results, and 47 failures. One primary vaccination among the women gave a perfect result, and of 34 re-vaccinations 5 were failures. Among the children there were 221 primary vaccinations and 105 re-vaccinations, failure resulting in 62 and 36 instances respectively. All the vaccinations were carried out with lymph from the Army Vaccine Institute, Aldershot.

II.—Royal Malta Artillery.

The average strength of non-commissioned officers and men of this corps was 706, the principal statistics of sickness and mortality among them being given in the following table :— *Malta.*

1903. Average Strength.	Admissions.	Deaths.			Invalids.		Average constantly Sick.	Ratio per 1,000 of Strength.				
		In the Command.	Of Invalids.	Total.	Sent Home.	Finally Discharged.		Admissions.	Deaths.	Invalids Sent Home.	Invalids finally Discharged.	Constantly Sick.
706	283	—	—	—	—	8	12·10	400·9	—	—	11·33	17·14

The admission rate is higher than in 1902 by 110·5 and than the decennial average rate by 5·8 per 1,000, while the constantly sick rate is higher than in the previous year by 1·96 per 1,000, and than the ratio for the preceding ten years by ·24 per 1,000.

The average sick time to each soldier was 6·26 days, as compared with 5·54 in the previous year, and with 6·17, the average for the preceding ten years ; the average duration of each case of sickness 15·61 days is shorter than in 1902 by 3·47 days, but is identical with the decennial average period.

The sickness, mortality, &c., arranged according to the various sections disease, will be found in Abstract IIIa.

General Diseases.—There were 23 admissions for influenza and 2 for enteric fever. Other continued fevers caused 35 admissions, comprising 28 of simple continued fever and 7 of Mediterranean fever. Tubercular diseases were represented by 2 admissions, both for tubercle of lung.

Secondary syphilis caused 6 admissions, soft chancre 1, and gonorrhœa 12, or a total of 19 admissions for venereal diseases, equivalent to a ratio of 26·9 per 1,000, as compared with 20·5 in 1902, and 28·9 the decennial average rate.

Parasitic diseases caused 7 admissions, comprising 4 cases of scabies, and 3 of tænia solium.

For rheumatism there were 11 admissions, for debility 4, and there were also 4 admissions recorded under other general diseases, viz., for cyst, malignant new growth, non-malignant new growth, and diabetus mellitus.

Local Diseases.—Diseases of the nervous system were represented by 1 case each of epilepsy, neuralgia, and mania. There were 10 cases of ophthalmic affection, 9 being due to conjunctivitis and 1 to iritis.

Diseases of the respiratory system caused 25 admissions, 23 of which were due to bronchitis, and 2 to pneumonia.

Under diseases of the digestive system, 33 admissions were recorded, of which 7 were for tonsillitis, 6 each for colic and diarrhœa, 3 each for inflammation of dental periosteum and sore throat, 2 each for abscess of dental periosteum and jaundice, and 1 each for inflammation of mouth, gastralgia, piles, and inflammation of liver.

The lymphatic system was represented by 3 admissions for inflammation of the lymphatic glands, and under diseases of the generative system, in addition to the cases of soft chancre referred to under venereal diseases, there were 4 admissions for orchitis, and 1 for balanitis.

There were 7 admissions for diseases of organs of locomotion, 9 for diseases of the connective tissue, and among 34 admissions for diseases of the skin, 17 were due to boils, 8 to eczema, 4 to ulcers, 2 each to whitlow and onychia, and 1 to corn.

Malta.

INJURIES.—Of 45 cases of local injury, 18 were due to wounds, 10 each to contusions and blisters of feet, 6 to sprains, and 1 to fracture, the ratio of prevalence being 63·7 per 1,000, as compared with 26·0 in in 1902, and 77·7 the decennial average rate.

INVALIDING.—Eight men were discharged during the year as medically unfit for further service, the causes of invaliding being tubercle of lung 3 cases, epilepsy 2 cases, and malignant new growth, mania, and bronchitis 1 case each, the ratio, 11·33 per 1,000, being higher than in the preceding year by 1·74, and than the decennial average rate by 1·20.

OFFICERS.—There were 17 cases of sickness in an average strength of 32, comprising 6 cases of influenza, 3 of simple continued fever, 2 of bronchitis, and 1 each of nervous weakness, conjunctivitis, inflammation of lymph glands, abscess of connective tissue, boil, and sprain.

WOMEN AND CHILDREN.—In an average strength of 125 women, 12 cases of sickness are recorded, and among the children there were 24 admissions in an average strength of 285, chiefly due to debility, bronchitis, and digestive disorders. One death occurred from bronchitis.

VACCINATION.—Amongst the children there were 24 primary vaccinations, 9 of which resulted in failure. Of 86 re-vaccinations among recruits 42 were perfect, 20 modified, and 24 cases resulted in failure. All vaccinations were performed with lymph from the Army Vaccine Institute, Aldershot.

RECRUITING.—The number of men who presented themselves for medical examination on enlistment for the Royal Malta Artillery was 195, of whom 112 were rejected. The principal causes of rejection were defective vision and under chest measurement.

SANITARY CONDITIONS.

I.—MALTA.

The Principal Medical Officer (Colonel W. O. Wolseley, R.A.M.C. reports that the barracks and hospitals are kept in as satisfactory a condition as the structural arrangements will allow. The barracks are in many cases old, and chiefly casemates, the only modern ones at present in occupation being St. George's and Imtarfa. New barracks have been built at St. Andrews, but they are not yet occupied by troops. A block, affording accommodation for two infantry companies, has been built at Floriana, and taken into occupation during the year.

In connection with the various district sanitary reports, the following are the chief points noted:—

Floriana District.—The barracks are very old, and consequent on structural defects the ventilation is not all that could be desired. Electric light is laid on throughout the barracks. Latrine accommodation, water supply, and means of ablution are sufficient. At Nôtre Dame drinking water has been laid on to all huts, and at Salvatore a bath house has been erected. In Floriana barracks two bunks have been pulled down to give greater freedom and convenience to the troops in the coffee-bar and recreation room. A new cooking apparatus has been erected in the cook-house, and the single quarters for married men in the married quarters, Floriana Parade, are being converted into double quarters.

At *Valletta Hospital* the following improvements have been effected during the year:—A new boiler and range to the kitchen; hot water laid on to wash-house in No. 23 Ward; five new pans in No. 20c Ward latrine; a bath with hot water laid on, the soil pipes removed, and the sink renewed

in the Sisters' quarters, and floor of the latrine in lower yard concreted. The heating apparatus in the operating room was completed. Electric light is used, but is not very satisfactory. *Malta.*

In the *Camerata* married quarters, one quarter on each floor is being converted into latrines and bath-rooms for the married non-commissioned officers and men.

Marsamuscetto, and Old Laboratory Barracks.—The drainage, latrines, means of ablution, and ventilation, are reported as satisfactory and the health of the troops has been good.

Lower St. Elmo.—These barracks are situated in a low lying part of the town of Valletta, and the barrack yard is only a few feet above the level of the sea, and during very stormy weather sea water finds its way into it. The lighting is not good. The ventilation is as satisfactory as can be expected. The drainage is satisfactory.

At *Upper St. Elmo* a latrine is under process of repair, but with this exception no improvements or defects are specially noted.

Tigné District.—The drainage is now satisfactory, several new sections have been made, while others are in process of construction.

Manoel.—The accommodation in these barracks is insufficient for a battalion of infantry at full strength. The latrines are all on the dry earth system. Two new latrines, with thirteen seats to each, have been erected, and urinals with water-carriage system have also been provided. The ventilation and lighting are not considered satisfactory. Owing to the paucity of married quarters, the majority of the married men live in hired tenements at Sliema.

Verdala and Isola Districts.—No improvements or defects are specially noted.

Fort Ricasoli.—The barracks are all casemates, the rooms are lofty, but not well ventilated. The sanitary condition is otherwise satisfactory.

At *Cottonera Hospital* the necessity for a hot water supply to the first and second floors is again brought to notice. During the year an incinerator and a steam disinfecting apparatus have been erected.

Forrest Hospital.—Although supplemented by tents, the hospital was unable at times to accommodate all the sick from St. George's Barracks and Pembroke Musketry Camp, the overflow being sent to Cottonera. The sanitary condition is as satisfactory as obtainable, considering the age and structure of the building. Three water tanks on the roof were recovered, the old covers not being effective, and allowing large quantities of dust, &c., to gain admission.

St. George's Barracks.—These barracks are of modern structure, and their sanitary condition is good. The drainage is generally satisfactory. The accommodation and insufficiency in size of the married quarters are again brought to notice. Ventilation is satisfactory.

At *Citta Vecchia Sanatorium* 597 patients were treated during the year, as compared with 515 in 1902. The number of direct admissions was 373, the majority of whom came from the camp at Ghain Tuffieha, the remainder being transfers from the various station hospitals. There were 22 women and 33 children treated in the women's sanatorium during the year.

Imtarfa.—Minor improvements only were carried out during the year. The accommodation in the hospital is now sufficient, owing to the new system of minor ailments being treated in barracks.

Ghain Tuffieha Camp.—The drinking water was condemned, and a supply from a spring, conveyed to the camp by pipes, has been found to be a great improvement. Recommendations have been put forward for new latrines and urinals.

Mellieha Camp.—The sanitary condition of the camp has been good, and the health of the troops most satisfactory.

At *Gozo* a portion of the drainage system is undergoing repair.

Royal Malta Artillery.—At Fort Lascaris the sanitary condition is reported as satisfactory. The drainage was remodelled last year, and is in good

alla. working order. At Calcara Camp the construction of a bath has again been strongly recommended. No rations are issued, a grant of fourpence *per diem* being made in lieu thereof. This allowance is not considered sufficient to purchase a good daily meal.

II.—Crete.

The Senior Medical Officer (Major C. J. McDonald, M.D., R.A.M.C.) reports that the health of the troops throughout the year has been good. The camp, which is situated on the ramparts on the western side of the town, is in itself satisfactory from a sanitary point of view.

As in the previous year, the chief sanitary undertaking has been the suppression of possible breeding places for mosquitoes. As it was recognised that it would be impossible to effect anything on a large scale in an island where malaria is prevalent everywhere, all efforts were concentrated within the danger zone, and, as far as possible, men were prevented from going outside that area at night time. Night attacks, which necessitated the men remaining for hours in low-lying places, among long grass, in the vicinity of creeks and streams, were discontinued, and a projected scheme of extended manœuvres, during which the men would have had to encamp in a mosquito-infested country, was similarly abandoned. As soon as the rains began to ease off, all the ground in the camp and its vicinity was carefully examined, and a permanent outlet to a large deep hollow, in which rain-water collected in large quantities, was established. The wells and tanks used for irrigation purposes in the market gardens lying between the camp and the town were also kept under control, the wells by means of oil, and the tanks by having them run dry and then well swept out at least once a week. Difficulty was experienced in treating the wells in connection with the houses bordering on the camp, and recommendations were made to the authorities that water should be laid on in pipes to this quarter, and that fountains or standing taps should be erected in convenient situations. This is to be taken in hand shortly, and the danger will be thus completely eliminated.

As in former years, the water for the use of the troops was obtained from a large well, known as the "Venetian Well." It proved satisfactory, but as there are houses and cesspits at no great distance, it was for greater security boiled. A number of Soyers' stoves at the rate of one for each cookhouse were issued to replace the camp kettles formerly in use, to boil the water in.

The conservancy is on the dry earth system which has worked satisfactorily, the soil being removed twice daily in covered carts.

The rations were of good quality and sufficiently varied. Fresh vegetables were easily procurable, and there was fruit in abundance throughout the year.

There is not much change in the town of Kandia, but it is kept clean superficially and there is an absence of smell, in which respect it compares very favourably with towns of its class in the East. The present municipal authorities show such a spirit of energy and intelligence that it is only reasonable to hope that a great improvement will be effected within the next few years. No public latrines or proper urinals exist, a fact which is of great inconvenience to the men when visiting the town, and the matter has been brought to the notice of the civil authorities and is being dealt with. The island of Spinalonga which is situated near the east coast of the main island has been taken over by the Cretan authorities for the purpose of segregating the lepers. The new hospital continues to perform excellent work and during the past year has become better equipped to meet the calls made on it. The general health of the inhabitants seems to be very good, and there has been no epidemic outbreak with the exception of malaria.

V.—ON THE HEALTH OF THE TROOPS SERVING IN THE DOMINION OF CANADA.

Sickness and Mortality.

Canada.

The average strength of the troops serving in the Command was 1,986, of whom 1,669 were stationed at Halifax, N.S., and 317 at Victoria, British Columbia. The troops stationed in the Command throughout the year were Nos. 58 and 98 Companies Royal Garrison Artillery, Nos. 18, 40, the second half of 44, and 48 Companies and supernumerary staff, Royal Engineers, 5th Battalion Royal Garrison Regiment, and detachments of the Army Service Corps, Royal Army Medical Corps, Army Ordnance Corps, Army Pay Corps, and Garrison Staff.

The only arrival in the Command during the year was No. 103 Company, Royal Garrison Artillery, from Bermuda, in December; and there was one departure, No. 83 Company, Royal Garrison Artillery, from Victoria, B.C., to Hong Kong, in the same month.

The following table shows the admission, mortality, and invaliding rates, &c., among the troops in the Command:—

1903. Average strength.	Admissions.	Deaths.			Invalids.		Average constantly Sick.	Ratio per 1,000 of Strength.				
		In the Command.	Of Invalids.	Total.	Sent Home.	Finally Discharged.		Admissions.	Deaths.	Invalids Sent Home.	Invalids finally Discharged.	Constantly Sick.
1,986	643	5	1	6	36	21	39·53	323·8	3·02	18·13	10·57	19·91

In comparison with the ratios given in the previous year, that of admission shows a decrease of 234·2 per 1000, that of mortality a decrease of 1·50, and the constantly sick rate a decrease of 4·96. Compared with the average ratios for the preceding ten years the admission, mortality, and constantly sick rates are lower by 299·3, 2·13, and 7·73 respectively.

The average sick time to each soldier was 7·26 days, which is shorter than that given in the preceding year by 1·82 days, and than the decennial average by 2·83 days. The average duration of each case of sickness was 22·44 days, which is longer by 6·17 days than that recorded for the previous year, and by 6·25 days than that of the decennial period.

In Abstract XXXIV is a table showing the health statistics for the various corps which served in the Command during the year. Excluding detachments and corps of small annual strength the highest admission rate was 446·8 per 1,000 in No. 58 Company, Royal Garrison Artillery, the next

Canada.

highest being 399·2 in No. 98 Company, followed by 358·6 in No. 83 Company, Royal Garrison Artillery. Taken together, the Royal Engineers gave an admission ratio of 162·7 per 1,000. The highest constantly sick rate was 31·02 per 1,000 in No. 58 Company, Royal Garrison Artillery, followed by 24·16 per 1,000 in No. 98 Company. The lowest rate was given by the Royal Engineers as a whole, with 13·65 per 1,000, followed by No. 83 Company, Royal Garrison Artillery, with 15·15 per 1,000. Of the deaths in the Command, 2 occurred in the Royal Garrison Regiment, and 1 each in the Royal Artillery, Royal Engineers, and Garrison Staff and Departments.

The sickness and mortality among the troops, arranged according to the ages of the men, are shown in the following table :—

Ages.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 20 years ..	83	31	—	1	373·5	—	12·05
From 20 to 25 years ..	373	176	1	5	471·8	2·68	13·40
„ 25 „ 30 „ ..	354	108	1	4	305·1	2·82	11·30
„ 30 „ 35 „ ..	491	121	—	8	246·4	—	16·29
„ 35 „ 40 „ ..	628	178	3	13	283·4	4·78	20·70
Over 40 years	57	29	—	5	508·8	—	87·72
Total ..	1,986	643	5	36	323·8	2·52	18·13

With regard to the influence of service in the Command on sickness and mortality amongst the troops, the following table has been compiled :—

Length of Service in Command.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 1 year	914	386	2	20	422·3	2·19	21·88
From 1 to 2 years ..	824	185	1	11	224·5	1·21	13·35
„ 2 „ 3 „ ..	89	28	1	3	314·6	11·23	33·71
„ 3 „ 4 „ ..	80	24	—	1	300·0	—	12·50
„ 4 „ 5 „ ..	29	7	—	—	241·4	—	—
„ 5 „ 10 „ ..	42	13	1	1	309·5	23·81	23·81
Over 10 years	8	—	—	—	—	—	—
Total ..	1,986	643	5	36	323·8	2·52	18·13

In Abstract IV will be found the sickness, mortality, &c., arranged according to the different sections of disease.

GENERAL DISEASES.—There were only 2 admissions for *eruptive fevers*, both cases of measles, giving a ratio of 1·0 per 1,000, as compared with 12·1 in the preceding year. *Influenza* caused 37 admissions, equal to a ratio of 18·6 per 1,000, as compared with 28·7 in the previous year, and 35·5 the average rate for the preceding ten years. The cases were mild in character. A single case of *diphtheria* was admitted at Victoria, B.C., in which the serum treatment was carried out with good result.

Malarial fevers caused 8 admissions, giving a ratio of 4·0 per 1,000, as compared with 1·7 in 1902. *Septic diseases* were the cause of 4 admissions, or a ratio of 2·0 per 1,000, as compared with 1·7 in the previous year, and 1·5 the decennial average rate. All were cases of erysipelas, and were of a mild type.

Tubercular Diseases were the cause of 3 admissions, and 1 death, for tubercle of lung, the corresponding ratios per 1,000 being 1·5 and ·50. The admission rate is higher by ·9 than that of the preceding year, but lower, to a similar extent, than the decennial average rate.

Venereal Diseases.—There were 10 admissions for *primary syphilis*, equal to a ratio of 5·0 per 1,000, showing a marked decrease (7·6 and 18·6 respectively) as compared with the ratio for 1902 and the decennial average rate. A single case of soft chancre occurred, which, if added to the above, gives an admission rate of 5·5 for primary venereal sores, which is lower than the previous year's rate by 14·6, and than the average rate by 25·1. *Secondary syphilis* caused 21 admissions, or a ratio of 10·6 per 1,000, showing an increase on the previous year's rate of 2·0, but a decrease of 5·7 in comparison with the decennial average rate. Under *gonorrhœa* 90 admissions are shown, giving a ratio of 45·3 per 1,000, which is lower than the previous year's rate by 28·3, and than that of the decennial average rate by 32·6.

The total admission rate for all forms of venereal disease was 61·4 per 1,000, or below the rate for 1902 by 40·9, and than the decennial rate by 63·4 per 1,000. The number of men constantly sick from all classes of venereal disease was 11·36, which equals a ratio of 5·72 per 1,000, and is lower than the ratio for 1902 and that of the decennial average by 1·11 and 1·20 respectively.*

Parasitic Diseases gave rise to 14 admissions, the ratio being 7·0 per 1,000, which is fractionally above (·1) the previous year's rate, but below that of the decennial average by 2·4. The cases included 8 of scabies, and 3 each of tænia solium and ringworm.

Alcoholism.—Under this head there were 9 admissions, giving a ratio of 4·5 per 1,000, which shows a decrease of ·7 as compared with the previous year, and is also below the average by ·3. One death occurred under this head.

Rheumatism.—Under this head are shown 44 admissions including 1 for rheumatic fever. The ratio per 1,000, 22·2, shows a decrease as compared with the previous year's rate of ·8, and of 6·3 in comparison with that of the decennial average.

Debility caused 15 admissions, or a ratio of 7·6 per 1,000, showing an increase as compared with the previous year's rate and that of the preceding ten years by 5·3 and 6·1 respectively.

Other general diseases were the cause of 3 admissions, comprising 1 case each for mumps, cyst, and anæmia. The ratio, 1·5 per 1,000, is lower than that for 1902 by ·8 and than the decennial average rate by 6·1.

Local Diseases.—Under *diseases of the nervous system* there were 19 admissions giving a ratio of 9·6 per 1,000, and showing an increase as compared with the rates for the preceding year and the decennial average of 6·2 and ·7 respectively. The admissions included neuralgia 5 cases, vertigo 4, nervous weakness 3, epilepsy 2, melancholia 2, and headache, acute mania, and general paralysis of insane 1 case each. There was no death.

Diseases of the Eye were represented by 4 admissions, all for conjunctivitis, equal to a ratio of 2·0 per 1,000, showing a decrease as compared with the previous year's and decennial average rates of 1·4 and 6·8 respectively. For *other organs of special sense* there were only 3 admissions, all being for aural disease; the ratio, 1·5 per 1,000, is below the rate for the previous year and that of the decennial average by 7·7 and 5·6 respectively.

Diseases of the Circulatory System were the cause of 13 admissions and 2 deaths. The ratio of admissions equalled 6·5 per 1,000, which is higher than the rate for 1902 and that of the decennial average by 4·8 and 1·2 respectively. The cases comprised 7 of valvular disease (1 fatal), and 6 of disordered action of heart. There was also a death from valvular disease of heart in an invalid who had left the Command.

* There were 2 admissions for ulcer of penis of non-venereal origin, with ·11 men constantly sick. If, as in former years (prior to 1897), these cases were included with those of primary syphilis and soft chancre under the heading of primary venereal sores, the admission and constantly sick rates for all forms of venereal diseases would equal 62·4 and 5·78 per 1000 respectively.

'anada.

Diseases of the Respiratory System caused 42 admissions, equal to a ratio of 21·1 per 1,000, which is lower than the rate for the preceding year by 7·1, and than the decennial average rate by 15·3. Among the admissions were 28 of bronchitis, 8 of spasmodic asthma, 3 of pneumonia, and 1 each of hæmorrhage of lung, pleurisy and empyema. There was 1 death, due to pneumonia.

Diseases of the Digestive System.—There were 100 admissions, under this head equal to a ratio of 50·4 per 1,000, which is lower by 91·0 and 55·1 respectively than the previous year's and decennial average rates. Amongst the cases included were 50 of affections of the mouth and throat, 17 of dyspepsia, 7 of diarrhœa, 6 of typhlitis, 6 of jaundice, 5 of piles, and 3 of colic.

Diseases of the Lymphatic System with 6 admissions, furnished a ratio of 3·0 per 1,000, which is lower than the previous year's rate and that of the decennial average by 2·2 and 11·6 respectively. All the cases were due to inflammation of the lymphatic glands.

For *diseases of the urinary system* there were 3 admissions, 2 being for incontinence of urine, and 1 for albuminuria. The ratio, 1·5 per 1,000, is lower than that of the preceding year by 1·9, and than the decennial average rate by 1·4.

Diseases of the Generative System were represented by 18 admissions, or a ratio of 9·1 per 1,000, showing a decrease of 13·9 and 15·4 respectively as compared with the previous year's and decennial average rates. In addition to the admissions for ulcer of penis and soft chancre already referred to there were 8 cases of orchitis, 3 of stricture of urethra, 2 of balanitis, and 2 of varicocele.

Diseases of the Organs of Locomotion with 21 admissions gave a ratio of 10·6 per 1,000, which shows a decrease of 2·0 as compared with that for 1902, and of ·5 in comparison with the decennial average rate. The cases comprised 14 of synovitis, 4 of bursitis, 2 of myalgia, and 1 of ostitis.

Diseases of the Connective Tissue caused 13 admissions, equal to a ratio of 6·5 per 1,000, which is lower by 11·9 and 16·7 respectively than the ratios for the previous year and the preceding ten years. The admissions were 6 for inflammation and 7 for abscess.

Diseases of the Skin furnished 23 admissions, giving a ratio of 11·6 per 1,000, which shows a decrease as compared with the previous year's and the decennial average rates of 24·6 and 27·9 respectively. The principal causes of admission were ulcers, eczema, impetigo and boils.

INJURIES.—All of the admissions are shown under *local injuries* which were 115 in number, giving a ratio 57·9 per 1,000, which compared with the previous year's and decennial average rates shows a decrease of 31·2 and 52·4 respectively. Wounds, sprains, contusions and fractures, account for the majority of the admissions. There was 1 death, due to simple fracture with compression of spinal cord in a man, who, while under the influence of drink, fell out of bed on his head.

SURGICAL OPERATIONS.—The principal operations during the year were as follows:—Operation on lymphatic organs, for removal of glands (1); breaking down of adhesions on account of fracture (1); suturing of tendon on account of wound (1); reduction of dislocation (1); opening and draining of chest on account of empyema (1); excision of the vermiform appendix (2); excision and ligature of piles (1); removal of veins on account of varicocele (2); and removal of prepuce, due to gonorrhœa (1).

Chloroform was the anæsthetic used in 10 cases and ether in 1 instance. One man was invalided to England for discharge. The results in the remaining cases were favourable and there were none remaining in hospital at the close of the year.

INVALIDING.—The number of men sent to England as invalids during the year was 36, equal to a ratio of 18·13 per 1,000, which is higher than in 1902 by 11·81, and than the decennial average rate by 5·77.

Of the men invalided, 1, or 12·05 per 1,000, was under 20 years of age ; 5, or 13·40 per 1,000 were between 20 and 25 years ; 4, or 11·30 per 1,000, were between 25 and 30 years ; 8 or 16·29 per 1,000, were between 30 and 35 years ; and 18, or 26·28 per 1,000, were over 35 years of age. As to service in the Command, 20 men, or 21·88 per 1,000 were in their first year, 11, or 13·35 per 1,000, were in their second year, 3, or 33·71 per 1,000, were in their third year, and 2, or 12·58 per 1,000, had over three years' service in the Command. The causes of invaliding were, valvular disease of heart 5 cases, debility 4 cases, mental disease 4 cases, rheumatism 3, gonorrhœa 3, epilepsy 2, spasmodic asthma 2, synovitis 2, fracture 2, wounds 2, and 1 each on account of secondary syphilis, nervous weakness, hæmoptysis, albuminuria, incontinence of urine, orchitis and sycosis. *Canada.*

There were 21 men finally discharged as medically unfit, the equivalent ratio being 10·57 per 1,000, which is above the previous year's rate and that of the decennial average by 5·40 and 1·97 respectively. The causes of discharge were as follows :—Debility 4 cases, mental diseases 3, valvular disease of heart 3, epilepsy 2, and conjunctivitis, rheumatism, inflammation of spinal cord, degeneration spinal cord, Bright's disease, orchitis, curvature of spine, wound and fracture, 1 case each respectively.

OFFICERS.—The average strength was 77, and there were 38 cases of sickness, equal to a ratio of 493·5 per 1,000, as compared with 646·2 in the preceding year. The admissions included 12 for influenza, 3 each for myalgia and inflammation of connective tissue, 2 each for rheumatism, bronchitis, and sycosis, and single instances of other disorders. There was 1 death, which was due to alcoholism. No cases were invalided during the year.

WOMEN.—In an average strength of 299 there were 209 admissions and 2 deaths, equal to ratios of 699·0 and 6·69 per 1,000 respectively, as compared with 370·9 and *nil* in the preceding year. Among the cases were 27 of diarrhœa, 27 of bronchitis, 20 of influenza, 15 of anæmia, 14 of neuralgia, 12 each of debility and dyspepsia, and 9 of rheumatism. The deaths were both due to valvular disease of heart.

CHILDREN.—The average strength was 665, the admissions numbered 345 and there were 14 deaths. The admission and mortality rates, 518·8 and 21·05 per 1,000, both show increase, as compared with 1902, to the extent of 84·8 and 9·73 respectively. The principal causes of admission were, bronchitis, 73 cases, diarrhœa 53, chicken-pox 31, diseases of the mouth and throat 37, whooping cough 30, dyspepsia 16, diseases of the connective tissue 11, measles 9, scarlet fever, debility, conjunctivitis, and impetigo 7 each, and influenza 6 cases. Of the deaths, 9 were caused by diarrhœa, 2 by pneumonia, and 1 each were due to whooping cough, eclampsia, and enteritis.

VACCINATION.—With lymph obtained locally at Halifax, N.S., and from the City Board of Health, Victoria, B.C., there were 6 re-vaccinations among the men, 5 with perfect result, and 1 failed. Amongst the children were 18 primary vaccinations, all with perfect result.

With lymph from the Army Vaccine Institute, Aldershot, there were 16 cases of re-vaccination among the men, resulting in 3 failures ; among the women 3 cases of primary vaccination and 4 of re-vaccinations with successful result ; and among the children 18 cases of primary vaccination and 4 of re-vaccination, with 1 failure in the former, while the latter all failed.

SANITARY CONDITIONS.

Canada. The Senior Medical Officer (Lieutenant-Colonel H. W. Murray, M.B., R.A.M.C.) states that no insanitary condition is noted in the reports of the medical officers as having had a prejudicial effect on the health of the troops during the year.

The leading sanitary improvements effected during the year are as follows:—

Halifax.—A new ablution room, containing a bath and two basins, with hot and cold water laid on, has been provided for the barrack room of the detachment Royal Army Medical Corps at the Station Hospital. Water has been laid on to the Garrison Church. A urinal has been provided for barrack stores in the Pavilion Barracks.

At Glacis Barracks two new schools, one for adults and one for infants, were completed during the year and taken into use. They are built of brick, well ventilated, warmed by means of hot-water pipes, and lighted by electricity. They contain commodious class and teachers' rooms, water closets with automatic flushing cisterns, and urinals; water for drinking purposes has also been laid on.

At Melville Island Military Prison a new cookhouse has been completed and taken into use.

Owing to the great increase in the number of women and children during the year, by the arrival of the families of the 5th Royal Garrison Regiment, it was found impossible to accommodate them all in Government quarters, and houses had to be hired in the town. These houses are scattered about the city, in different streets, and at varying distances from barracks. On the whole, they are satisfactory, although they do not altogether come up to modern hygienic ideas, but the families have enjoyed very good health in them.

Victoria, B.C.—Work Point Barracks.—The drainage system of the officers' quarters has been re-constructed, and a latrine for officers provided in the Royal Artillery portion of this barracks. A new infant school has been built, and taken into use, and a coal-yard provided.

The Royal Engineers' non-commissioned officer's mess has been enlarged.

VI.—ON THE HEALTH OF THE TROOPS SERVING IN BERMUDA.

SICKNESS AND MORTALITY.

I.—EUROPEAN TROOPS.

Bermuda.

The average strength of warrant officers, non-commissioned officers, and men serving in the Command during the year was 2,577, and the garrison throughout the year was composed of the District Establishment, Royal Garrison Artillery, the 3rd, 27th, and 36th Companies, Royal Engineers, 3rd Battalion Royal Warwickshire Regiment, and detachments Army Service Corps, Royal Army Medical Corps, Army Ordnance Corps, and Garrison Staff.

The arrivals during the year comprised Nos. 2, 3 and 95 Companies, Royal Garrison Artillery from England in December, and the 3rd Battalion Royal Fusiliers from Egypt in the same month. The departures consisted of No. 66 Company, Royal Garrison Artillery, to Jamaica, No. 67 Company to St. Lucia, and No. 103 Company to Halifax, all during December, and the 4th Battalion Worcestershire Regiment to Jamaica, also in December.

The following table shows the admission, mortality, and invaliding rates, &c., among the troops in the Command :—

1903. Average Strength.	Admissions.	Deaths.			Invalids.		Average constantly Sick.	Ratio per 1,000 of Strength.				
		In the Command.	Of Invalids.	Total.	Sent Home.	Finally Discharged.		Admissions.	Deaths.	Invalids Sent Home.	Invalids finally Discharged.	Constantly Sick.
2,577	1,370	8	1	9	72	30	72·96	531·6	3·49	27·94	11·64	28·31

Comparing these ratios with those of the previous year a decrease of 39·3 is observed in the admission rate, of 6·26 in the mortality rate, and of 9·39 in the ratio of constantly sick ; but compared with the decennial average rates that of admission shows an increase of 29·4, while the death and constantly sick rates show a decline of 5·19 and 1·62 respectively.

The average sick time to each soldier was 10·33 days, which is shorter by 3·43 days than in the previous year, and than the decennial period by ·60 of a day. The average duration of each case of sickness was 19·44 days, which is shorter by 4·66 and 2·31 days respectively than those for 1902 and the average period.

In Abstract XXXIV is a table showing the health statistics for the different corps which served in the Command during the year. Excluding detachments, the Europeans of the 3rd West India Regiment, and corps of small average strength, the highest admission and constantly sick rates were 696·4 and 39·08 in the 4th Battalion Worcester Regiment, followed by No. 66 Company, Royal Garrison Artillery, with 549·4 and 33·71 per 1,000

Bermuda. The lowest admission and constantly sick rates were in No. 27 Company, Royal Engineers, with 200·0 and 10·30, the ratios for the whole of the Royal Engineers being only 284·1 and 17·16 per 1,000.

Of the deaths, 7 or 4·33 per 1,000, occurred in the Infantry, and 2 or 3·27 per 1,000, in the Royal Artillery.

The sickness and mortality among the troops, arranged according to the ages of the men, are shown in the following table :—

Ages.	Average Strength.	Admission.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 20 years ..	389	171	—	6	439·6	—	15·42
From 20 to 25 years ..	1,327	948	6	44	714·4	4·52	33·15
„ 25 to 30 „ ..	546	168	1	12	3 7·7	1·83	21·98
„ 30 to 35 „ ..	208	56	1	3	269·2	4 81	14·42
„ 35 to 40 „ ..	87	20	—	2	229·9	—	22·99
Over 40 years.. ..	20	7	—	5	350 0	—	250·00
Total	2,577	1,370	8	72	531·6	3·10	27 94

With regard to the influence of service in the Command on sickness and mortality amongst the troops, the following table has been compiled :—

Length of Service in Command.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 1 year	1,457	839	5	50	575·8	3·43	34·32
From 1 to 2 years ..	943	464	2	19	492·0	2·12	20·15
„ 2 to 3 „ ..	129	45	1	2	348·9	7·75	15·50
„ 3 to 4 „ ..	21	13	—	—	619·0	—	—
„ 4 to 5 „ ..	13	3	—	1	230·8	—	76·92
„ 5 to 10 „ ..	12	5	—	—	416·7	—	—
Over 10 years.. ..	2	1	—	—	500·0	—	—
Total	2,577	1,370	8	72	531·6	3·10	27·94

The admissions, deaths, &c., according to the different sections of disease, will be found in the table given in Abstract V.

GENERAL DISEASES.—There was no admission, under the head of *eruptive fevers*, which in the previous year were represented by 3 admissions for scarlet fever. For *influenza*, there were 24 admissions, equal to a ratio of 9·3 per 1,000, as compared with 3·4 in 1902, and 11·7, the decennial average rate.

Enteric fever was the cause of 46 admissions and 1 death, equal to ratios of 17·8 and ·39 per 1,000, as compared with 30·7 and 4·39 in the previous year, and 25·2 and 4·13 the average rates for the preceding ten years. The percentage of mortality to attack was 2·2, as compared with 14·3 in 1902, and 16·4, the average for the decennial period.

Of these cases 12 came from Prospect, 3 from St. George's, 1 from Port's Island, and 30 from Watford. Several of the cases were severe, with delirium and high temperatures, and relapses were numerous. The fatal case died of hæmorrhage, and had two relapses, each more severe than the last. The principal medical officer remarks that the naval forces at Ireland Island were affected in the same proportion as the military, and that the disease is prevalent among the civil population.

The following tables show, as far as possible, the influence of age and service in Bermuda on the incidence of enteric fever :— *Bermuda.*

Age.	Average Strength.	Admissions.	Deaths.	Ratios per 1,000 of Strength.	
				Admissions.	Deaths.
Under 20 years	389	1	—	2·6	—
From 20 to 25 years ..	1,327	32	1	24·1	·75
„ 25 „ 30 „ ..	546	11	—	20·1	—
„ 30 „ 35 „ ..	208	2	—	9·6	—
„ 35 „ 40 „ ..	87	—	—	—	—
„ 40 „ and upwards	20	—	—	—	—
Total ..	2,577	46	1	17·8	·39

Length of Service in Bermuda.	Average Strength.	Admissions.	Deaths.	Ratios per 1,000 of Strength.	
				Admissions.	Deaths.
Under 1 year	1,457	25	1	17·2	·69
1 to 2 years	943	16	—	17·0	—
2 „ 3 „	129	3	—	23·3	—
3 „ 4 „	21	1	—	47·6	—
4 „ 5 „	13	—	—	—	—
5 „ 10 „	12	—	—	—	—
10 years and upwards ..	2	1	—	500·0	—
Total ..	2,577	46	1	17·8	·39

The admissions and deaths occurred in the following months :—

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Admissions ..	3	—	1	1	—	2	2	10	10	6	6	5	46
Deaths	—	—	—	—	—	—	—	—	—	1	—	—	1

Other continued fevers were the cause of 61 admissions, or a ratio of 23·7 per 1,000, which, compared with the rate given in the previous year, and that of the decennial average, shows a decrease of 4·1 in the former, and an increase of 3·1 in the latter. Sixty of the cases were due to simple continued fever, and 1 case to Mediterranean fever.

There were 5 admissions for *dysentery*, equal to a ratio of 1·9 per 1,000, showing a decrease of 4·4 and 1·9 respectively, as compared with the previous year's rate and that of the decennial period.

For *malarial fevers* there were 11 admissions, giving a ratio of 4·3 per

ermuda. 1,000, which is lower than the rate for 1902 by 33·2, and that of the ten years' average by 16·9.

Tubercular Diseases accounted for 4 admissions, or a ratio of 1·6 per 1,000, which is lower than in 1902 by 1·3, and than the decennial average rate by 1·0.

Venereal Diseases.—There were 8 admissions, or a ratio of 3·1 per 1,000, for *primary syphilis*, which is lower than the previous year's rate by 2·3. If to this be added the sickness from soft chancre, for which there were 7 admissions and ·72 men constantly sick, the total admission ratio for primary venereal sores equals 5·8 per 1,000, which is lower, by ·5 and 3·3 respectively, than the ratio for 1902, and that of the preceding ten years' average. *Secondary syphilis*, with 32 admissions, gave a ratio of 12·4 per 1,000, which is higher than the previous year's and the decennial average rates by 6·1 and 1·9 respectively. *Gonorrhœa* furnished 39 admissions, giving a ratio of 15·1 per 1,000, which is higher than that of the previous year by 2·9, but is below the average rate by 4·8. Including all forms of venereal disease, the total admission ratio is 33·4 per 1,000, which shows an increase on the previous year's rate of 8·5, but a decrease as compared with that of the decennial average of 6·1. The ratio of constantly sick for these diseases was 2·45 per 1,000, which is lower by ·70 and 1·18 respectively, than that given in the previous year and the average rate for the preceding ten years.*

Parasitic Diseases.—There were 87 admissions under this head, giving a ratio of 33·8 per 1,000, which is higher than the previous year's rate and that of the decennial average by 18·2 and 22·5 respectively. The majority of the admissions were for scabies. Under the head of *alcoholism*, there were 5 admissions, one being shown as delirium tremens. The ratio of admission was 1·9 per 1,000, as compared with 4·9 in the previous year, and 6·6, the average rate for the ten years 1893–1902.

Rheumatism, with 25 admissions, gave a ratio of 9·7 per 1,000, which is lower than the previous year's and decennial average rates by 6·9 and 6·3 respectively.

Debility.—Under this head there were 29 admissions, giving a ratio of 11·3 per 1,000, which is below the previous year's rate by 26·2, and 2·4 less than the average. *Other general diseases* caused 10 admissions, giving a ratio of 3·9, as compared with 2·4 in the previous year, and 4·1 the decennial average rate. All the admissions were for non-malignant new growth. A death occurred from malignant new growth in a man who had been invalided to England.

Local Diseases.—*Diseases of the nervous system* were the origin of 20 admissions, giving a ratio of 7·7 per 1,000, which is below the previous year's rate by 6·4, but is identical with the decennial average ratio. The cases comprised 5 each of neuralgia and melancholia, 3 of epilepsy, 2 of headache, and single cases of chorea, occupation-neurosis, somnambulism, nervous weakness and dementia.

Diseases of the Eye accounted for 40 admissions, or a ratio of 15·5 per 1,000, which is higher than the rates for the previous year and decennial period by 8·7 and 6·3 respectively. The admissions were chiefly due to conjunctivitis, iritis and ametropia.

Diseases of Other Organs of Special Sense caused 28 admissions, giving a ratio of 10·9 per 1,000, or 3·2 below the ratio for the previous year, but fractionally above the decennial average. The cases comprised 22 of inflammation of external meatus, 4 of perforation membrana tympani and 2 of deafness.

Diseases of the Circulatory System caused 36 admissions, or a ratio of 14·0 per 1,000, which is below the rate for 1902 by 6·0, but above the average

* There were 7 admissions for ulcer of penis of non-venereal origin, with ·55 men constantly sick. If, as in former years (prior to 1897), these cases were included with those of primary syphilis and soft chancre under the heading of primary venereal sores, the admission and constantly sick rates for all venereal diseases would equal 36·1 and 2·66 respectively.

rate for the preceding ten years by 5·8. The cases comprised 10 admissions, with 1 death, for valvular disease, and 22 for disordered action of the heart, 2 for phlebitis and 2 for varix. *Bermuda.*

Diseases of the Respiratory System accounted for 68 admissions and 4 deaths, giving ratios of 26·4 and 1·55 per 1,000 respectively. Compared with the previous year's and decennial average ratios, the admission rate shows an increase of 14·2 in the former and of 9·3 in the latter comparison. The chief causes of admission were bronchial affections, of which there were 46 cases. The deaths were all due to pneumonia.

Diseases of the Digestive System caused 229 admissions, or a ratio of 88·9 per 1,000, which is below the previous year's rate by 14·5, but above that of the decennial average by 6·4. Affections of the mouth and throat contributed 96 of the cases, diarrhœa 34, dyspepsia 24, colic 18, and jaundice 11 cases. There was no death.

Diseases of the Lymphatic System were the cause of 6 admissions, all for inflammation of lymphatic glands. The ratio per 1,000, 2·3, is below the rates for the previous year and decennial average by 3·5 and 3·7 respectively.

Diseases of the Urinary System were represented by 12 admissions, equal to a ratio of 4·7 per 1,000, as compared with 1·5 and 2·2, the ratios for the previous year and the average of the preceding ten years. The diseases included 4 each of acute nephritis and calculus, 3 of incontinence of urine, and 1 of phosphaturia.

Diseases of the Generative System accounted for 23 admissions, equal to a ratio of 8·9 per 1,000, which is below the previous year's rate and that of the decennial average by 3·3 and 1·5 respectively. In addition to the cases of soft chancre and ulcer of penis, already referred to under venereal affection, there were 6 admissions for orchitis, 2 for balanitis, and 1 for phimosis.

Diseases of the Organs of Locomotion gave 23 admissions, of which 16 were for synovitis, 4 for bursitis, 2 for atrophy of muscles, and 1 for myalgia. The admission ratio equalled 8·9 per 1,000, which is fractionally lower than the ratio for 1902, but is higher than that of the decennial average by 2·0.

Diseases of the Connective Tissue caused 90 admissions, 37 being for inflammation, 52 for abscess, and 1 for œdema. The ratio, 34·9 per 1,000, is lower than the previous year's and decennial average rates by 10·0 and ·6 respectively.

Diseases of the Skin were the cause of 151 admissions, the ratio, 58·6 per 1,000, being higher than the previous year's and decennial average rates by 15·2 and 21·4 respectively. Boils, eczema, whitlow and ulcer, as usual, were the chief cause of admission.

INJURIES.—Under this head are recorded 244 admissions and 2 deaths, equal to ratios of 94·7 and ·78 per 1,000. The ratio of admission is higher by 23·5 than the previous year's rate, and by 3·3 than that of the decennial average.

Under *general injuries* are shown 3 admissions and 2 deaths; of the former 2 were due to effects of heat (heat-stroke), and 1 to exhaustion. Both the deaths were due to suffocation from submersion, the coroner's verdict in each case being "accidental drowning." The majority of the cases of *local injury* were due to wounds, contusions and sprains.

POISONS.—A man of the Royal Engineers, who was employed in the painter's shop, was admitted for lead colic; the case recovered and returned to duty.

SURGICAL OPERATIONS.—These included excision of cyst, excision of lipoma, evacuation of abscess, suturing of tendons of finger on account of wound, and operation for inguinal hernia. All the operations had successful results, and chloroform was the anæsthetic used, with one exception, in which nitrous-oxide gas was employed in conjunction with chloroform.

INVALIDING.—The number of men sent home as invalids was 72, giving a ratio of 27·94 per 1,000, which is below the previous year's rate by 26·67, but above that of the decennial average by ·70.

The invaliding rate in the Royal Artillery was 27·78 per 1,000, in the

Bermuda.

Royal Engineers 18·94, in the Infantry 27·87, and among the Garrison Staff and Departments 58·14 per 1,000.

As to age, 6 men or 15·42 per 1,000 were under 20 years of age; 44, or 33·15, were between 20 and 25 years; 12, or 21·98, were between 25 and 30 years; 3, or 14·42, were between 30 and 35 years; 2, or 22·99 per 1,000, were between 35 and 40 years of age; and 5, or 250·00 per 1,000, were over 40 years of age.

With regard to service in the Command, 50 men, or 34·32 per 1,000, were in their first year of service; 19, or 20·15, were in their second year; 2, or 15·50, were in their third year; and 1, or 76·92 per 1,000, had between four and five years' service in the Command.

The chief causes of invaliding were :—13 for nervous diseases, including 4 for mental disorders, 8 for valvular disease, and 3 for disordered action of heart, 9 for digestive disorders, 8 for debility, 7 for local injuries, 5 for enteric fever, and 4 for tubercle of lung.

There were 29 men discharged during the year as medically unfit for further service, the ratio being 11·25 per 1,000, or higher than the rate in the previous year by ·04, and than the decennial average rate by 3·76. The causes of discharge were :—valvular disease of heart 5, debility, epilepsy and melancholia 4 each; tubercle of lung and disordered action of heart 2 each; and neurasthenia, chorea, inflammation of brain, inflammation of external meatus, orchitis, necrosis of bone, wound, and fracture, 1 case each.

OFFICERS.—The average strength was 103 and there were 53 cases of sickness, giving a ratio of 514·6, which is higher than the rate in 1902 by 187·5. Among the cases treated were 4 of influenza, 2 of simple continued fever, 1 of enteric fever, 3 of malarial fever, 2 of debility, 2 of neuralgia, 3 of bronchitis, 14 of digestive disorders, 4 of diseases of connective tissue, 3 of diseases of skin, 1 of heat stroke, and 10 of local injuries. There was no death, but 4 officers were invalided, viz. :—1 each for enteric fever, inflammation of liver, dislocation of articular cartilage and fracture.

WOMEN.—With an average strength of 131, the cases of illness numbered 117, and there were 2 deaths. The admission rate, 893·1 per 1,000, exceeds that of the previous year by 416·5, and the death rate, 15·27 per 1,000, is also higher, to the extent of 5·92. The majority of the admissions were caused by debility with 16 cases, digestive disorders 26, respiratory affections 8, and diseases incidental to women 16 cases. The deaths were due to inflammation of liver and Bright's disease.

CHILDREN.—In an average strength of 211, there were 230 cases of sickness and 7 deaths. The admission ratio, 1090·0 per 1,000, was higher than in 1902 by 332·0, but the death rate was lower by 11·41. The cases included 71 of digestive disorders (40 being for diarrhœa), 53 of bronchial affections, 17 of local injuries, 14 of measles, 12 of whooping cough, 8 of diseases of the eye, 6 each of influenza and simple continued fever, 3 of diphtheria and 2 of enteric fever. The deaths were due to diarrhœa in four instances and there was one each from diphtheria, bronchitis, and chronic abscess.

VACCINATION.—Amongst soldiers, other than recruits, there was 1 primary vaccination, and 71 re-vaccinations with 51 failures. Among women there was 1 primary vaccination, and 7 re-vaccinations, all with successful result, and among the children there were 65 primary vaccinations with 16 failures, and 41 re-vaccinations with 30 failures. The lymph was obtained from the United States of America.

II.—NON-EUROPEAN TROOPS.

The average strength of non-commissioned officers and men, exclusive of the European sergeants of the 3rd Battalion West India Regiment, which constituted the only non-European troops stationed in the Command, was 202. The regiment left the Command for Jamaica in November, leaving only European troops to garrison Bermuda.

The following table shows the admission, mortality, invaliding rates, &c.:— *Bermuda.*

1903. Average Strength.	Admissions.	Deaths.			Invalids.		Average constantly Sick.	Ratio per 1,000 of Strength.				
		In the Command.	Of Invalids.	Total.	Sent to West Indies.	Finally Discharged.		Admissions.	Deaths.	Invalids sent to West Indies.	Invalids finally Discharged.	Constantly Sick.
202	103	2	—	2	12	10	7·87	509·90	9·90	59·41	49·50	38·96

The admission, death, and constantly sick rates are higher than in the previous year by 92·6, 8·44 and 5·61 respectively.

The average sick time to each soldier was 14·22 days and the average duration of each case of sickness 27·89 days, as compared with 12·17 and 29·17 days respectively.

GENERAL DISEASES.—There were no admissions for *eruptive fevers, enteric fever*, or *other continued fevers.*

Dysentery caused 3 admissions, equal to a ratio of 14·9 per 1,000, showing an increase of 12·0, as compared with the ratio for the previous year.

Malarial fevers were the cause of 20 admissions with a ratio of 99·0 per 1,000, which is higher than the previous year's rate by 80·0. Remittent fever caused 14 of the admissions with 1 death.

Under *septic diseases* there was a single admission for erysipelas.

Tubercular Diseases were represented by 2 cases of general tubercle, and 1 of tubercle of lung, giving a ratio of 14·9 per 1,000, as compared with 10·2 in the preceding year.

Venereal Diseases.—Secondary syphilis caused 15 admissions, giving a ratio of 74·3 per 1,000, as compared with 7·3 in the previous year; and *gonorrhœa*, with 14 admissions, gave a ratio of 69·3 per 1,000, as compared with 29·3 in 1902. Taking all forms of venereal disease together, the admission ratio was 143·6 per 1,000, and that for constantly sick 18·22 per 1,000, both being higher than in the preceding year by 104·1 and 13·93 respectively.

Parasitic Diseases caused 4 admissions, 3 being for scabies and 1 for ringworm, as compared with 11 admissions, 8 for scabies and 3 for ringworm, in 1902. There was no admission recorded under *alcoholism.*

Rheumatism, with 4 admissions, of which 1 was returned as rheumatic fever, gave a ratio of 19·8 per 1,000, which is above the previous year's rate by 8·1, but below the average of the preceding four years by 5·2. Under *debility* and *other general diseases* there was no admission recorded.

LOCAL DISEASES.—*Diseases of the Nervous System* furnished no admission. *Diseases of the eye*, with 2 admissions for conjunctivitis, gave a ratio of 9·9 per 1,000, or below the rate in the preceding year by 20·9; while *diseases of other organs of special sense* and *diseases of the circulatory system* were unrepresented.

Diseases of the Respiratory System caused 8 admissions, 5 for bronchitis and 3 for pneumonia, giving a ratio of 39·6 per 1,000, as compared with 30·8 in 1902. *Diseases of the digestive system*, with 6 admissions, 3 for diarrhœa and 1 each for inflammation of tonsils, dyspepsia and jaundice, gave a ratio of 29·7 per 1,000, or 24·5 less than the previous year's rate.

Diseases of the Lymphatic System gave 6 admissions, equal to a ratio of 29·7 per 1,000, which is higher by 26·8 than that given in 1902. The cases were 5 for inflammation and 1 for suppuration of lymphatic glands. *Diseases of the urinary system* caused no admission, and *diseases of the generative system* furnished only one, a case of orchitis.

For *diseases of the organs of locomotion* there were 3 admissions, 1 each for inflammation of bone, synovitis and atrophy of muscle, giving a ratio of 14·9 per 1,000, as compared with 4·4 in the previous year.

Bermuda. *Diseases of the connective tissue*, with 5 admissions, 4 of abscess and 1 of inflammation, gave a ratio of 24·8, or an increase of 7·2 on the previous year's rate. *Diseases of the skin* caused 2 admissions, due to herpes and boil respectively, equal to a ratio of 9·9, which is 2·6 in excess of the rate for the preceding year.

INJURIES.—Under this head there were 4 admissions for *local injuries*, 3 for wounds and 1 for contusion, the ratio being 19·8 per 1,000, as compared with 35·1 in the previous year. Under *general injuries* one death, due to suffocation from submersion, is recorded.

INVALIDING.—The number of invalids sent to the West Indies was 12, equal to a ratio of 59·41 per 1,000, as compared with 54·17 in the preceding year. With regard to age, 3, or 44·12 per 1,000, were between 20 and 25 years of age; 8, or 97·56 per 1,000, were between 25 and 30 years; and 1, or 27·78 per 1,000, was between 30 and 35 years of age. As to service in the Command, all had less than 1 year. The causes of invaliding were: general tubercle 3, tubercle of lung 1, secondary syphilis 4, and 1 each of gonorrhœa, suppuration of lymphatic glands, acute nephritis and atrophy of muscles. There were 10 men discharged the service as medically unfit, equal to a ratio of 49·50 per 1,000, as compared with 20·50 in 1902. Among these were 3 of tubercle of lung, 2 of general tubercle, 2 of secondary syphilis, and 1 each of gonorrhœa, inflammation of lymph glands, and atrophy of muscles.

WOMEN AND CHILDREN.—The average strength of women was only 2, and there were 5 attacks of illness and 1 death. The cases were: 1 each of syncope, bronchitis, cystitis, hyperæmia of breast, and abrasion. The case of syncope terminated fatally. The average strength of the children was also 2, with 2 admissions and 1 death; the cases were debility and diarrhœa, the latter proving fatal.

VACCINATION.—There were 56 re-vaccinations amongst the men, with 26 failures; 2 re-vaccinations among the women with successful result; and 6 re-vaccinations among the children with failure in one instance. The lymph was obtained from the United States of America.

SANITARY CONDITIONS.

The Principal Medical Officer (Colonel E. H. Fenn, C.I.E., R.A.M.C.) states that the general sanitary condition has been good; the water-carriage system has been extended to Boaz as well as to Prospect and St. George's. There has been a marked decrease in the number of enteric fever cases as compared with the previous year. Most of the cases came from Boaz and Warwick Camp; at the latter place the dry earth system is still in use. Since the water-carriage system has been introduced in the Island there has at times been some anxiety regarding the sufficiency of the water supply for flushing and ablution purposes. The matter was brought to the notice of the general officer commanding, and the question has been taken up. More catchment area and tanks will have to be provided owing to the fact that the Bermuda water supply depends on the rainfall.

The following improvements have been carried out during the year:—

Prospect.—(1) Two new soldiers' blocks completed; (2) New block provided for the band; (3) A new mess for the non-commissioned officers of the Royal Engineers; (4) A new church; (5) A large new latrine; (6) A new ablution room; (7) Water-closets introduced into several officers' quarters. The new married quarters are approaching completion.

St. George's.—(1) New married quarters being built; (2) Surface drainage in barracks has been improved; (3) Private houses have been taken over to avoid some overcrowding which existed amongst the married families.

Boaz.—(1) New water-carriage system completed; (2) Several wooden huts erected for troops formerly under canvas; (3) New cemetery has been enclosed.

VII.—ON THE HEALTH OF THE TROOPS SERVING IN THE BARBADOS COMMAND.

Sickness and Mortality.

I.—European Troops.

Barbados.

The average strength of the troops serving in the Barbados Command during the year was 882.

The force consisted of No. 84 Company Royal Garrison Artillery for 11½ months, and No. 67 Company, Royal Garrison Artillery for 17 days, the District Establishment Royal Garrison Artillery, a detachment of the Royal Engineers, head-quarters and 5 companies of the 3rd Battalion Lancashire Fusiliers for 11½ months, the head-quarters and 5 companies of the 4th Battalion Worcestershire Regiment for 14 days, and detachments of the Army Service, Royal Army Medical, Army Ordnance, Army Pay Corps, and Garrison Staff.

The stations occupied were Barbados, St. Lucia, and Trinidad with an average strength of 491, 221, and 170 respectively. The latter station was re-occupied towards the end of March after an interval of 14 years.

In the following table are given the admission, mortality and invaliding rates among the troops serving in the Command :—

Station.	1903. Average Strength.	Admissions.	Deaths.			Invalids.		Average constantly Sick.	Ratio per 1,000 of Strength.				
			In the Command.	Of Invalids.	Total.	Sent Home.	Finally Discharged.		Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
Barbados	491	495	2	—	2	17	} 10	29·33	1008·1	4·07	34·62	} 11·34	59·74
St. Lucia	221	200	2	—	2	9		14·48	905·0	9·05	40·72		65·52
Trinidad	170	94	1	—	1	—		4·04	552·9	5·88	—		23·76
Total ...	882	789	5	—	5	26	10	47·85	894·6	5·67	29·48	11·34	54·25

The admission and constantly sick rates are lower than in the previous year by 532·4 and 18·71 per 1,000, and also below the decennial average rate by 328·5 and 21·90 respectively. The mortality rate, 5·67 per 1,000, is lower than that of the previous year and the decennial average by ·50 and 3·25 respectively. The average sick time to each soldier was 19·80 days, which is shorter than in the preceding year by 6·83 days, and than the decennial period by 8·00 days. The average duration of each case of sickness was 22·14 days, being longer than that given in the previous year by 3·48 days, but shorter than the average by ·58 of a day.

In Abstract XXXIV is a table showing the health statistics for the various regiments and corps which served in the Command during the year. In the Royal Artillery the admission ratio was 1085·6 and that of constantly sick 81·02 per 1,000, as compared with 1654·8 and 94·47 in the preceding year. In the infantry these rates were 922·6 and 51·68, as against 1469·3 and 72·60 in 1902.

Barbados.

Of the deaths, 1, or 5·35 per 1,000, occurred in the Artillery, 3, or 4·84 per 1,000, in the infantry, and 1, or 23·26 per 1,000, in the Garrison Staff and Departments (average strength 43).

The sickness and mortality among the troops, arranged according to the ages of the men, are shown in the following table :—

Ages.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 20 years ..	61	40	—	—	665·7	—	—
From 20 to 25 years ..	549	551	1	9	1,003·6	1·82	16·39
„ 25 „ 30 „ ..	173	152	1	6	878·6	5·78	34·68
„ 30 „ 35 „ ..	63	30	2	10	476·2	31·75	158·73
„ 35 „ 40 „ ..	31	15	1	1	483·9	32·26	32·26
Over 40 years ..	5	1	—	—	200·0	—	—
Total ..	882	789	5	26	894·6	5·67	29·48

With regard to influence of service in the Command on sickness and mortality among the troops, the following table has been compiled :—

Length of Service in Command.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 1 year	231	354	1	8	1,532·5	4·33	34·63
From 1 to 2 years ..	624	434	4	18	695·5	6·41	28·85
„ 2 „ 3 „ ..	18	1	—	—	55·6	—	—
„ 3 „ 4 „ ..	1	—	—	—	—	—	—
„ 4 „ 5 „ ..	5	—	—	—	—	—	—
„ 5 „ 10 „ ..	3	—	—	—	—	—	—
Over 10 years ..	—	—	—	—	—	—	—
Total ..	882	789	5	26	894·6	5·67	29·48

In Abstract VII is a table showing the principal statistics of sickness and mortality arranged according to the various sections of disease.

General Diseases.—There was no case of *small-pox* amongst the troops in the garrison, as compared with a single admission in 1902. *Other eruptive fevers* were represented by 1 case of cow-pox and 4 of dengue; all of the latter occurred at Barbados, and were of a mild character.

Influenza, with 14 admissions, gave a ratio of 15·9 per 1,000, as compared with *nil* in the previous year. *Enteric fever* caused 2 admissions, or a ratio of 2·3 per 1,000, as compared with *nil* in 1902, and 1·9 the decennial average rate. Both cases occurred at Barbados, and were attributed to the introduction of milk from a forbidden source into the sergeants' mess of the 3rd Battalion Lancashire Fusiliers. After a protracted convalescence they recovered. There had been no case in the Command since 1898, when there was one case at St. Lucia.

Other continued fevers caused 41 admissions, 37 at Barbados, 1 at St. Lucia and 3 at Trinidad, the ratio being 46·5 per 1,000, which is below the rate for the previous year and that of the decennial average by 7·0 and 35·0 respectively. *Dysentery*, with 2 admissions, gave a ratio of 2·3 per 1,000, and shows a slight decrease as compared with the preceding year's rate, but a fractional increase on the decennial average ratio.

Malarial fevers gave rise to 38 admissions, giving a ratio of 43·1 per 1,000, which shows a large decrease (367·4) as compared with the ratio for 1902, and is also considerably below the decennial average ratio (81·4). Of the admissions, 32 were for ague and 6 for remittent fever, of which 2 of ague and 3 of remittent fever occurred at Barbados, 26 of ague and 1 of remittent at St. Lucia, and 4 of ague and 2 of remittent at Trinidad. The remarkable decrease, as compared with the preceding year, may be attributed to various causes, amongst which were the more healthy character of the season of 1903, the departure of some of the troops who had been some years in the station and had suffered from malaria, and their relief by healthy men from a non-malarial station, and also to the large amount of draining and clearing accomplished at St. Lucia during the year, and the great diminution effected thereby in the number of anopheles. *Barbados.*

There were no admissions shown under the heading of *Septic Diseases.*

Tubercular Diseases gave 5 admissions, equal to a ratio of 5·7 per 1,000. Four of the cases were for tubercle of lung. No admission occurred under this heading in 1902.

Venereal Diseases.—For *primary syphilis* there were 52 admissions, giving a ratio of 59·0 per 1,000, which is lower than the previous year's rate and that of the decennial average by 86·1 and 46·8 respectively. If to this be added the sickness from soft chancre, for which there were 76 admissions and 6·08 men constantly sick, the total admission ratio for primary venereal sores equalled 145·1 per 1,000, as compared with 225·3, the ratio for the previous year, and 183·3, the average rate of the preceding ten years. *Secondary syphilis*, with 26 admissions, gave a ratio of 29·5 per 1,000, which is lower than the preceding year's rate by 2·4, and than the average ratio by 37·7. Three of the cases were treated by intra-muscular injection of mercury, with good results. *Gonorrhœa* caused 108 admissions, or a ratio of 122·4 per 1,000, showing a decrease, as compared with the previous year's and decennial average rates, of 29·9 and 34·7 respectively.

Taking all forms of venereal disease together, the total admission ratio was 297·1 per 1,000, which is below the previous year's rate by 112·4, and that of the decennial average by 110·5. The ratio of constant inefficiency, 23·08 per 1,000, also shows decrease in both these comparisons to the extent of 11·73 and 13·71 respectively.*

Parasitic diseases gave 31 admissions, equal to a ratio of 35·1 per 1,000, which is lower than the previous year's rate by 39·0, but higher than the decennial average rate by 11·0. Of the admissions, 23 were for ringworm, 4 for scabies, and 2 each for tænia solium and ascaris lumbricoides. Only 1 admission was recorded under the head of *alcoholism.*

Rheumatism, with 17 admissions, gave a ratio of 19·3 per 1,000, which is 1·3 lower than the previous year's rate, and 20·4 below the average.

There were 14 admissions for *debility*, the ratio being 15·9 per 1,000, which is lower than the previous year's and decennial average rates by 3·6 and 2·9 respectively.

Other general diseases gave 8 admissions, comprising 4 cases of non-malignant new growth, 3 of anæmia and 1 case of diabetes mellitus. The ratio, 9·1 per 1,000, is higher than the previous year's rate by 5·0, but is below the average by 2·1.

Local Diseases.—*Diseases of the nervous system* were the cause of 6 admissions (3 for neuralgia, 2 for inflammation of nerves and 1 ophthalmoplegia), equal to a ratio of 6·8 per 1,000, as compared with 12·4 and 11·2, the ratios of the preceding year and the decennial average. There was no case of mental disease.

Diseases of the Eye accounted for 9 admissions, or a ratio of 10·2 per 1,000, which is above the previous year's rate by 5·0, and that of the decennial average by 1·4. Seven of the admissions were for conjunctivitis, 1 for ametropia and 1 for squint.

Diseases of other organs of special sense gave 10 admissions, equal to a ratio of 11·3 per 1,000, or a decrease of 5·2 as compared with the rate for 1902,

* There was no case of ulcer of penis of non-venereal origin.

Barbados.

and of 12·1 in comparison with the decennial average rate. All of the admissions were due to inflammation of the external meatus.

Diseases of the Circulatory System with 19 admissions, gave a ratio of 21·5 per 1,000, showing an increase as compared with the previous year's and decennial average rates of 11·2 and 10·7 respectively. Of the admissions, 6 were recorded as valvular disease and 3 as disordered action of the heart; 8 as varix and 1 each for dilatation of the heart and phlebitis. There were 2 deaths—1 from valvular disease and 1 from dilatation of the heart.

Diseases of the Respiratory System caused 12 admissions, giving a ratio of 13·6 per 1,000, which shows an increase on the previous year's rate of 3·3, but a decrease, as compared with the decennial average, of 2·9. Bronchial affections were the chief causes of admission, and there were also 2 cases of asthma, and 1 each of pneumonia, pleurisy, and emphysema. A death occurred from pneumonia.

Diseases of the Digestive System, with 56 admissions, gave a ratio of 63·5 per 1,000, showing a decrease, as compared with the rates for the previous year and the decennial average, of 26·0 and 26·8 respectively. The chief causes of admission were dyspepsia 9 cases, caries of dentine 9, inflammation of stomach 8, constipation 6, sore throat 5 tonsillitis 5, colic 5, and diarrhœa 4 cases.

Diseases of the Lymphatic System with 35 admissions, gave a ratio of 39·7 per 1,000, which, compared with the previous year's rate and that of the decennial average, shows a decrease of 1·5 in the former and 14·7 in the latter. The admissions comprised 34 cases of inflammation and 1 of suppuration of lymphatic glands.

Diseases of the Urinary System gave 2 admissions, equal to a ratio 2·3 per 1,000, as compared with 3·1, the ratio for 1902, and 2·6 the average rate.

Diseases of the Generative System.—Under this head are shown 94 admissions, giving a ratio of 106·6 per 1,000, which is in excess of the previous year's rate and that of the decennial average by 13·0 and 4·7 respectively. Of the total admissions 76 were for soft chancre, and which have been already referred to under venereal diseases, 8 for orchitis, 6 for varicocele, and 1 each for stricture of urethra, phimosis, paraphimosis, and epididymitis respectively.

Diseases of the Organs of Locomotion with 6 admissions, furnished a ratio of 6·8 per 1,000, which is below that in the preceding year by 11·7, and is also lower than the decennial average rate by 7·3. Three of the cases were for synovitis, 2 for dislocation of articular cartilage, and 1 for caries of sternum.

Diseases of the Connective Tissue caused 27 admissions, or a ratio of 30·6 per 1,000, which is below the previous year's rate by 18·8, and that of the decennial average by 8·1. Of the admissions, 16 were for abscess and 11 for inflammation.

Diseases of the Skin were the cause of 59 admissions, giving a ratio of 66·9 per 1,000, and is above the previous year's rate and that of the decennial average by 7·2 and 9·1 respectively. The causes of admission were ulcer 18 cases, eczema 16, boil 12, onychia 5, whitlow 3, herpes 2, and impetigo, dermatitis, herpetiformis, and acne 1 case each.

INJURIES.—There were 88 admissions, all for *local injuries*, giving a ratio of 99·8 per 1,000, and showing an increase of 6·2 on the rate for 1902, but a decrease of 18·8 as compared with the decennial average rate. The cases comprised 26 for contusions, 24 for wounds, 22 for sprains, 4 for blisters of feet, 3 for wounds of neck (cut throat) self-inflicted, 3 for abrasions, 2 for burns and scalds, and 1 each for rupture of muscle, wound of cornea, dislocation and fracture. One of the cases of wound of neck died, and there was also another death from the same cause which occurred out of hospital. The coroner's jury in the former case returned a verdict of "suicide by cutting his throat with a razor," and in the latter "suicide whilst of unsound mind."

SURGICAL OPERATIONS comprised 5 for removal of enlarged inguinal lymphatic glands. Chloroform was the anæsthetic used.

INVALIDING.—The number of men invalided home from the Command was 26, giving a ratio of 29·48 per 1,000, as compared with 31·89 in the previous year, and 25·13, the average ratio for the preceding ten years. Of

the men invalided, 9 belonged to No. 84 Company, and 1 to the District Establishment, Royal Garrison Artillery, 15 to the 3rd Battalion Lancashire Fusiliers, and 1 was a European non-commissioned officer of the 2nd Battalion West India Regiment. *Barbados.*

With regard to age, 9 men, or 16·39 per 1,000, were between 20 and 25 years, 6 men, or 34·68 per 1,000, were between 25 and 30 years, 10, or 158·73 per 1,000, were between 30 and 35 years, and 1, or 32·26 per 1,000, was between 35 and 40 years of age. As to service in the Command, 8 men, or 34·63 per 1,000, had less than one year's service in the Command, and 18, or 28·85 per 1,000, were in their second year of service in the Command.

The causes of invaliding were :—Valvular disease of heart 5 cases, disordered action of heart, tubercle of lung, caries of dentine, and degeneration of nerves 2 cases each, and 1 case each for simple continued fever, ague, remittent fever, primary syphilis, rheumatism, diabetes mellitus, debility, melancholia, dilatation of heart, dyspepsia, hernia, inflammation of liver, and incontinence of urine.

There were 10 men finally discharged as medically unfit for further service, the ratio being 11·34 per 1,000, as compared with 15·43 in 1902, and 14·07, the average rate for the preceding ten years. The causes necessitating discharge were tubercle of lung 3 cases, valvular disease of heart 2, and debility, melancholia, hernia, incontinence of urine and necrosis 1 case each.

OFFICERS.—In an average strength of 56, there were 31 cases of illness and 1 death, equal to ratios of 553·6 and 17·86 per 1,000 respectively, as compared with 724·1 and *nil* in the preceding year. Among the cases treated were 6 for remittent fever, 4 for ague, 3 for dengue, 3 for influenza, 3 for simple continued fever, 2 for fracture, and 1 each for enteric fever, gout, debility, abscess of dental periosteum, tonsillitis, inflammation of stomach, inflammation of intestines, diarrhœa, wound and sprain. The death was due to enteric fever and occurred at St. Lucia, but was believed to have been contracted at Barbados, where the officer had been on leave for some days. Two officers were invalided, 1 for ague and 1 for remittent fever.

WOMEN.—The average strength was 61, with 28 cases of sickness, equal to a ratio of 459·0 per 1,000, which is lower than the previous year's rate by 273·1. Dengue, influenza, debility, rheumatism, and malarial fevers were the chief causes of admission.

CHILDREN.—The average strength was 101, and there were 23 admissions with 3 deaths, the corresponding ratios being 227·7 and 29·70 per 1,000, as compared with 288·7 and 30·93 in 1902. The chief causes of admission were tonsillitis, bronchitis, dyspepsia, and debility. All the deaths occurred at Barbados and were due to bronchitis, diarrhœa, and fracture of skull respectively, the latter being due to a fall from the upper verandah of the married quarters.

VACCINATION.—Out of 1 primary vaccination and 12 re-vaccinations amongst recruits, 2 were modified, 1 perfect, and 10 failed. Amongst soldiers other than recruits, out of 59 re-vaccinations 17 were perfect, 25 modified, and 17 failed. There were 6 re-vaccinations amongst the women, 2 of which were perfect and 4 modified. Of 20 primary vaccinations amongst the children, 13 were perfect and 7 were failures, and of 5 re-vaccinations all were successful.

The lymph used was in all cases obtained from the Army Vaccine Institute, Aldershot.

II.—Non-European Troops.

Barbados.

The average strength of the non-commissioned officers and men was 656 The force consisted of a detachment 1st Battalion West India Regiment at Barbados; the St. Lucia Company, Royal Garrison Artillery, a detachment West India Fortress Company, Royal Engineers, and a detachment 2nd Battalion West India Regiment which left for West Africa in January. The greater part of the troops have been stationed at Barbados and St. Lucia throughout the year, with an average strength of 326 and 330 respectively.

The following table shows the admission, mortality, and invaliding rates among these troops :—

Station.	1903. Average Strength.	Admissions.	Deaths.			Invalids.		Average constantly sick.	Ratio per 1,000 of Strength.				
			In the Command.	Of invalids.	Total.	Sent to Jamaica.	Finally Discharged.		Admissions.	Deaths.	Invalids sent to Jamaica.	Invalids finally Discharged.	Constantly Sick.
Barbados	326	236	3	—	3	—	24	14·41	723·9	9·20	—	73·62	44·20
St. Lucia	330	213	5	—	5	—	3	13·54	645·5	15·15	—	9·09	41·03
Total..	656	449	8	—	8	—	27	27·95	684·5	12·20	—	41·16	42·61

Comparing the statistics of the Command with those of the previous year, the admission and mortality rates have increased by 40·4 and 1·78 respectively, but the constantly sick rate shows a decline of 2·51 per 1,000; while in comparison with the decennial average rates those of admission and constantly sick have decreased by 285·6 and 15·79 respectively, but the mortality rate shows an increase of 2·23.

The average sick time to each soldier was 15·55 days, being shorter than in the previous year and than the decennial average by ·92 of a day and 5·77 days respectively. The average duration of each case of sickness was 22·72 days, or shorter than in the previous year by 2·85 days, but longer than the average of the preceding ten years by ·74 of a day.

The sickness and mortality among the troops, arranged according to the ages of the men, are shown in the following table :—

Age.	Average Strength.	Admissions.	Deaths.	Ratio per 1,000.	
				Admissions.	Deaths.
Under 20 years	17	9	—	529·4	—
From 20 to 25 years ..	220	244	5	1109·1	22·73
„ 25 „ 30 „ ..	278	157	2	564·7	7·19
„ 30 „ 35 „ ..	112	30	1	267·9	8·93
„ 35 „ 40 „ ..	26	7	—	269·2	—
Over 40 years	3	2	—	666·7	—
Total	656	449	8	684·5	12·20

With regard to the influence of service in the Command on sickness and mortality amongst the troops, the following table has been compiled :— *Barbados.*

Length of Service in Command.	Average Strength.	Admissions.	Deaths.	Ratio per 1,000.	
				Admissions.	Deaths.
Under 1 year	219	173	4	790·0	18·26
From 1 to 2 years ..	42	37	—	881·0	—
„ 2 „ 3 „ ..	43	16	1	372·1	23·26
„ 3 „ 4 „ ..	53	30	—	566·0	—
„ 4 „ 5 „ ..	35	42	1	1200·0	28·57
„ 5 „ 10 „ ..	133	102	2	766·9	15·04
Over 10 years	131	49	—	374·0	—
Total	656	449	8	684·5	12·20

In Abstract VIII will be found the sickness, mortality, &c., arranged according to the various sections of disease.

General Diseases.—*Eruptive fevers* were unrepresented during the year. *Influenza* with 6 admissions, furnished a ratio of 9·1 per 1,000. In the previous year there was only a single admission under this head.

Other Continued Fevers with 14 admissions for simple continued fever, gave a ratio of 21·3 per 1,000, which is 5·7 above the previous year's rate, but 39·4 below the average. All the cases occurred at Barbados and were of a mild type.

Dysentery caused 3 admissions, equal to a ratio of 4·6, which is lower than the ratio for 1902 by ·6, but above the decennial average rate by ·7 per 1,000. All of the cases occurred at St. Lucia and were not severe in character; in the previous year, when there was a similar number of admissions, all occurred in Barbados.

Malarial Fevers with 56 admissions, gave a ratio of 85·4 per 1,000, which, compared with the rate for 1902 and that of the decennial average shows a decrease of 29·2 and 36·7 respectively. All the cases (46 of ague and 10 of remittent fever) occurred at St. Lucia; the less breezy situation of the barracks at La Toc and the adjacent heavy jungle is stated to be the probable cause. The type of the disease was mild and there was no mortality. For *tubercular diseases* there were 6 admissions and 2 deaths, represented by ratios of 9·1 and 3·05 per 1,000 respectively, which are lower than the previous year's rates by 20·4 and 2·16, and than the decennial average rates by 3·9 and ·82 respectively. Tubercle of lung accounted for 3 of the admissions and both of the deaths.

Venereal Diseases.—The admissions for *primary syphilis* numbered 44, equal to a ratio of 67·1 per 1,000, which is lower than that of the preceding year by 26·7, and than the decennial rate by 16·8. If to this be added the sickness from soft chancre, for which there were 31 admissions and 2·11 men constantly sick, the total admission ratio for primary venereal sores equalled 114·3 per 1,000, as compared with 104·2 in 1902 and 158·8, the average rate. For *secondary syphilis* there were 25 admissions, or a ratio of 38·1 per 1,000, as compared with 83·3 in the previous year and 58·8 the decennial average rate. *Gonorrhœa* caused 93 admissions, or a ratio of 141·8 per 1,000, as compared with 50·4 and 119·1 respectively, the ratios for the previous year and the average of the preceding ten years. Including all forms of venereal disease, the total admission ratio for the Command was 294·2 per 1,000, which is higher than the corresponding rate in the previous year by 56·4, but lower than the average by 42·5. The total amount of constant inefficiency on account of these diseases was 22·53 per 1,000, which is above the rate in 1902 by ·93, but below the average rate by 4·42.

Barbados.

Parasitic diseases caused 4 admissions, equal to a ratio of 6·1 per 1,000, as compared with 6·9 in the preceding year, and 14·2 the decennial average rate. Of the cases, 3 were scabies and 1 ringworm. *Rheumatism* was the cause of 34 admissions, or a ratio of 51·8 per 1,000, which is above the previous year's rate by 36·2, but below that of the decennial average by 1·7. Two of the admissions, with 1 death, are shown under rheumatic fever. *Debility* caused only 1 admission as compared with 3 in the previous year. *Other general diseases* were represented by 1 admission for cyst.

LOCAL DISEASES.—*Diseases of the Nervous System* gave 2 admissions for neuralgia as compared with 2 for neuralgia and 2 for mental disease in the preceding year. *Diseases of the Eye* accounted for 8 admissions, 7 for conjunctivitis and 1 for ulcer of cornea, giving a ratio of 12·2 per 1,000, which, compared with the previous year's rate and that of the decennial average, shows a decrease of 3·4 and 4·9 respectively. *Diseases of other organs of special sense* were unrepresented in the year under report. *Diseases of the Circulatory System* caused 7 admissions, 4 for valvular disease and 2 for disordered action of heart, and 1 for endocarditis, equal to a ratio of 10·7 per 1,000, which is slightly above the previous year's rate (·3), and practically the same as that of the decennial average. The case of endocarditis terminated fatally. *Diseases of the Respiratory System* with 5 admissions, 4 for bronchitis and 1 for pneumonia, gave a ratio of 7·6 per 1,000, which is below the previous year's and decennial average rates by 6·3 and 27·2 respectively. *Diseases of the Digestive System* with 27 admissions furnished a ratio of 41·2 per 1,000, which, compared with the ratio for 1902, shows an increase of 8·2, but, in comparison with the average, a decrease of 35·3 is observed. The chief causes of admission were affections of the mouth and throat 9 cases, hernia 4, dyspepsia 4, colic 3, and diarrhœa 2 cases.

Diseases of the Lymphatic System, with 5 admissions for inflammation of lymphatic glands, gave a ratio of 7·6 per 1,000, being less by 11·5 and 21·1 respectively than the previous year's and decennial average rates. *Diseases of the Urinary System*, with 3 admissions, gave a ratio of 4·6 per 1,000 as compared with *nil* in 1902 and 3·1 the decennial average rate. Bright's disease caused 2 of the admissions, 1 proving fatal, and there was 1 case of cystitis. *Diseases of the Generative System* caused 43 admissions, or a ratio of 65·6 per 1,000, which is higher than the rate for 1902 by 41·3, but below the average rate by 31·3. In addition to the 31 cases of soft chancre, already referred to under venereal diseases, the admissions were 6 for orchitis, 4 for hydrocele, and 1 each for stricture of urethra and paraphimosis. Under *diseases of the organs of locomotion* 4 admissions were recorded, giving a ratio of 6·1 per 1,000, which is above the previous year's rate by ·9, but below the decennial average by 2·5. *Diseases of the Connective Tissue*, with 9 admissions, 6 for abscess and 3 for inflammation, gave a ratio of 13·7 per 1,000, showing an increase of 5·0 on the previous year's rate, but a decrease of 11·3 as compared with the decennial average ratio. *Diseases of the Skin* gave 13 admissions, or a ratio of 19·8 per 1,000, which is higher than the rate in the preceding year by ·7, but below that of the decennial average by 7·1. Ulcers, boils, and eczema were the chief causes of admission.

INJURIES.—35 admissions are recorded under this head, giving a ratio of 53·3 per 1,000, which is higher by 15·1 than the previous year's rate, but lower by 9·8 than that of the decennial average.

Of the admissions, 1, a fatal case of sunstroke, is shown under *general injuries*, and a death from suffocation from submersion, which occurred out of hospital, is also recorded under this heading. Of the admissions returned under *local injuries*, 13 were due to contusions, 10 to wounds, 8 to sprains, and 1 each to burn, abrasion and fracture. There was a death from gunshot wound inflicted by a comrade, in which the coroner's jury returned a verdict of "manslaughter."

SURGICAL OPERATIONS.—There were only 4 surgical operations of any importance performed during the year, two were for removal of lymphatic glands of the groin, one for partial amputation of penis, and the fourth for

the radical cure of hydrocele by excision of parietal part of sac. The first three recovered and were discharged to duty, and the last case remained in hospital at the end of the year and was progressing favourably. Chloroform was the anæsthetic used in each case. *Barbados.*

INVALIDING.—There were 27 men discharged during the year as medically unfit for further service, comprising 10 for secondary syphilis, 7 for tubercle, of which 4 were for tubercle of lung, 3 for caries of dentine, 2 for disordered action of heart, 2 for orchitis, and 1 each for mania, endocarditis and Bright's disease. The ratio per 1,000 was 41·16 which is lower by 28·28 than in the previous year, but higher by 3·91 than the average rate.

WOMEN AND CHILDREN.—The average strength of the women was 34, and there were 14 admissions, giving a ratio of 411·8 per 1,000, as compared with 190·5 in the previous year. Ague, remittent fever and debility were the chief causes of admission. The average strength of the children was 37 with 7 admissions, giving a ratio of 189·2 per 1,000, as compared with 136·4 in 1902. Simple continued fever gave 2 admissions, and there was 1 admission each for ague, remittent fever, oxyuris vermicularis, inflammation of stomach and diarrhœa. One death occurred, due to inflammation of stomach.

VACCINATION.—Amongst soldiers, other than recruits, there were 63 re-vaccinations with 12 perfect results, 38 modified results, and 13 failures. Amongst the children there were 5 primary vaccinations and 2 re-vaccinations, all with perfect result. The lymph was obtained from the Army Vaccine Institute, Aldershot.

RECRUITING.—Owing to the 3rd Battalion, West India Regiment, being disbanded and its members being incorporated in the 1st and 2nd Battalions of the same Regiment, recruiting was closed during the whole year.

SANITARY CONDITIONS.

The Senior Medical Officer (Lieut.-Colonel E. O. Milward, R.A.M.C.) reports that the health of the troops in the Command during the year has been very good, and there has been a marked decrease in the prevalence of malarial fevers and venereal disease amongst the European troops, as compared with the results of the preceding year.

The barrack and hospital accommodation were sufficient, and no defects as to ventilation or conservancy arrangements existed. The new system of applying a heavy oil to the slate slabs of urinals was being tried, and so far was reported to work satisfactorily. The water supply at Barbados and Trinidad was good and abundant, but at St Lucia it consists entirely of rain water, collected in large tanks and reservoirs from the galvanized iron roofs of buildings. The quality is described as good, requiring no filtration if properly attended to. The quantity, however, is found to be insufficient in the dry months, due to inadequate storage. This is to be dealt with.

The establisment of a separate supply for sanitary purposes has been recommended, and will be carried out as material and funds become available.

Several important sanitary improvements have been effected in the course of the year, others are in progress, and some have been estimated for in the Annual Barrack Estimates for 1904–5.

Barbados.—In anticipation of an early move of the garrison to St. Lucia, no works of importance were undertaken, a ten-bedded ward in the station hospital was structurally altered and cut off so as to adapt it for the isolation of tubercular cases. A shower bath apparatus has been placed in each of the two bath rooms of the upper and lower division of the hospital. Ablution accommodation in the Iron Barracks has been reported as inadequate.

Trinidad.—The old St. James's Barracks, after a lapse of 14 years were occupied by a detachment of the 3rd Battalion, Lancashire Fusiliers. The barracks are about two miles distant from the Port of Spain, and consist

Barbados. of two main blocks running north and south in line, but separated by an open space of 120 feet. The north block, occupied by the men, has two main end rooms and one central room on each floor. The block affords ample accommodation for 150 men, giving abundant cubic space and superficial area.

The buildings are in good state of preservation, and are lighted by electricity. The water supply is abundant, and the general sanitary arrangements are said to be satisfactory. A temporary hospital, with accommodation for 16 patients, was handed over by the Colonial Government for the use of the troops. The building is about 500 yards distant from the barracks, has broad verandahs, and is supported on stone pillars 5 feet high. The outbuildings are as yet incomplete, but representations have been made as to the erection of quarters for the Medical Establishment, together with ablution and store rooms. The water tanks have been rendered mosquito proof, and a connection with the adjacent barrack main has been recommended. The dispensary and office have been well fitted up, and a sink has been put up in the kitchen.

St. Lucia.—By the draining of swamps, clearing of jungle, erection of new buildings, &c., much has been done to improve the sanitary conditions and remove the causes of unhealthiness due to malaria, but much more remains to be done in the way of draining swampy areas, constructing concrete channels, and periodical clearing of jungle growth and vegetation on the land in the proximity of barracks.

At Vigïe the new hospital was opened in March for the accommodation of the European and non-European troops. It consists of two double-storeyed wings and of a central administrative block. There is also a small isolation hospital with two separate wards for two beds each. The total accommodation is for 52 beds. The arches in the verandahs, which in rainy weather made the windward side of the hospital damp, have been fitted with louvres. The water supply to the hospital is described as inadequate, but the defect is about to be remedied. A steam disinfector and an incinerator have been applied for. The provision of an adequate water supply for the troops at Vigïe is an engineering problem, the solution of which will probably be found in an increase of the storage capacity by means of large under-ground concrete reservoirs or tanks. The supply to the town of Castries is derived from mountain streams in the interior of the island, but the municipal authorities are not disposed to share it with the cantonment. The parade ground swamp has been drained and filled with sand. The cocoa-nut swamp has also been in great part reclaimed, a large drain has been passed through the middle of it, and an air motor pump is at work. The beneficial effects of this thorough draining are proved by the marked diminution in the number of mosquitoes in the majority of the buildings. The need of sinks in the kitchens of the huts at Vigïe, and of a permanent latrine for the use of the orderlies when employed at the isolation hospital has been pointed out, and will be attended to. A fine new residential quarter for a medical officer has been handed over during the year.

At La Toc special attention was given during the year to the clearing of a large ravine called the Toc valley, which till recently was a mass of dense tropical vegetation, at the bottom of which runs a water course obstructed by rocks, and thus leading to the formation of stagnant pools in which mosquito larvæ develop. The head of this valley has been cleared with excellent results, and now "presents a dry grassy slope instead of a pestiferous jungle harbouring mosquitoes." Sufficient funds were lacking for the completion of the work. The erection of native huts on private land in the neighbourhood of Toc is becoming a nuisance and a source of annoyance to the troops, being without any kind of sanitary arrangements, and outside military or municipal control. The bath room accommodation for the St. Lucia Company, Royal Garrison Artillery is insufficient, and an increase has been provided for in the annual barrack estimates. A number of new drains have been constructed near the married quarters, greatly improving the drainage of the barracks.

At Morne the drainage has been re-modelled and brought up to modern requirements. The erection of three blocks of barracks is being rapidly proceeded with, and sites for two additional blocks and subsidiary

buildings have been selected. An infant school and schoolmistress's quarters have been finished, and the road from the Head-quarter Offices to Victoria Road has been completed; various stores and workshops have also been erected. A site for a new cemetery has been selected, and all work connected therewith, such as approaches, &c., is in progress.

A scheme for supplying water to the Morne and La Toc quarters from the mountain streams in the Pitou Flore, after having been under consideration for years, is likely to be realised in a year or two. All the arrangements to start the work have been made, and a final decision is only awaited. A block of married quarters, regimental shops and stores, warrant officers' quarters, caretaker's quarters, and other services are in progress.

VIII.—ON THE HEALTH OF THE TROOPS SERVING IN JAMAICA.

Sickness and Mortality.

I.—European Troops.

Jamaica.

The average strength of the troops serving in Jamaica during the year was 564.

The troops stationed in the Command throughout the year were the district establishment Royal Garrison Artillery, with Staff of the Jamaica Company Royal Artillery, Royal Engineers, Staff of 1st Battalion West India Regiment, etc., and detachments of Army Service, Royal Army Medical, Army Ordnance Corps and Garrison Staff. The arrivals in the Command during the year were No. 66 Company Royal Garrison Artillery and a detachment 4th Battalion Worcestershire Regiment, both from Bermuda; while the departures were No. 47 Company Royal Garrison Artillery, for St. Helena, and the detachment 3rd Battalion Lancashire Fusiliers, for South Africa. The stations occupied by these were Newcastle, Port Royal, Up Park Camp, and Greenwich, with average strengths of 219, 126, 146, and 73 respectively.

The following table shows the admission, mortality, and invaliding rates, &c., among the non-commissioned officers and men :—

1903. Average Strength.	Admissions.	Deaths.			Invalids.		Average constantly Sick.	Ratio per 1,000 of Strength.				
		In the Command.	Of Invalids.	Total.	Sent Home.	Finally Discharged.		Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
564	475	2	—	2	13	11	25·35	842·2	3·55	23·05	19·50	44·95

The admission rate was higher than in the previous year by 120·8 per 1,000, and than that of the decennial average by 72·1 per 1,000, while the mortality and constantly sick ratios were lower than those in the previous year by 8·06 and 7·89 per 1,000, and than the decennial average rates by 8·43 and 4·49 respectively. The average sick time to each soldier, 16·41 days, was shorter than in 1902 by 2·88 days, and than the decennial period by 1·64 days. The average duration of each case of sickness, 19·48 days, was also shorter than in the previous year and than the decennial average by 7·25 and 3·95 days respectively.

In Abstract XXXIV is a table showing the health statistics for the various regiments and corps which served in the Command during the year.

The highest admission rate was 1087·5 in No. 47 Company, Royal Garrison Artillery (average strength, 160), and the lowest, 606·6 in the Royal Engineers (average strength, 61). One of the deaths occurred in the Royal Engineers, giving a ratio of 16·39 per 1,000, and the other was in the 3rd Battalion Lancashire Fusiliers, giving a ratio of 4·09.

The sickness and mortality among the troops, arranged according to the ages of the men, are shown in the following table :—

Ages.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 20 years ..	11	10	—	—	909·1	—	—
From 20 to 25 years ..	327	335	1	7	1,024·5	3·06	21·41
„ 25 „ 30 „ ..	128	78	—	2	609·4	—	15·63
„ 30 „ 35 „ ..	65	36	1	2	553·8	15·38	30·77
„ 35 „ 40 „ ..	29	15	—	2	517·2	—	68·97
Over 40 years ..	4	1	—	—	250·0	—	—
Total ..	564	475	2	13	842·2	3·55	23·05

With regard to the influence of service in the Command on sickness and mortality among the troops, the following table has been compiled :—

Length of service in Command.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 1 year	145	131	1	3	903·4	6·90	20·69
From 1 to 2 years ..	385	327	1	10	849·4	2·60	25·97
„ 2 „ 3 „ ..	29	14	—	—	482·8	—	—
„ 3 „ 4 „ ..	2	2	—	—	1,000·0	—	—
„ 4 „ 5 „ ..	2	—	—	—	—	—	—
„ 5 „ 10 „ ..	1	1	—	—	1,000·0	—	—
Over 10 years ..	—	—	—	—	—	—	—
Total ..	564	475	2	13	842·2	3·55	23·05

The admissions, deaths, &c., according to the different sections of disease will be found in Abstract IX.

GENERAL DISEASES.—*Eruptive Fevers*, for which no admission was recorded in 1902, were again unrepresented in the year under report; but *influenza*, which had no admission in that year, gave 11 cases, or a ratio of 19·5 per 1,000, as compared with *nil* in the previous year, and 20·9 the decennial average rate.

There was no admission for *enteric fever* or *other continued fevers*, but *dysentery* was represented by 2 admissions, equal to a ratio of 3·5 per 1,000, as compared with *nil* in the preceding year, and 10·6 the average rate.

Yellow Fever caused 5 admissions, the equivalent ratio being 8·9 per 1,000, showing an increase of 2·3 on the previous year's rate, and of 5·1 on the decennial average ratio. All the cases occurred at Port Royal, amongst men of the 47th Company Royal Garrison Artillery, during September and October. None of the cases proved fatal.

Jamaica.

Malarial Fevers were much more prevalent than in former years, and caused 107 admissions, or a ratio of 189·7 per 1,000, as compared with 48·1 the previous year's rate, and 69·0 the decennial average ratio. Of the admissions 90 were recorded as remittent fever, and 17 as ague. The Senior Medical Officer remarks "that the hurricane which occurred in the month of August, and the consequent heavy rainfall, had something to do with the increased number of admissions for these diseases.

Tubercular Diseases were represented by a single admission for tubercle of lung, giving a ratio of 1·8 per 1,000, which is below the rates for the previous year and decennial average by 3·2 and 2·5 respectively.

Venereal Diseases.—For *primary syphilis* there were 28 admissions, equal to a ratio of 49·7 per 1,000, or a decrease of 6·7 as compared with the rate given in 1902, and 17·9 below the average. If to this be added the sickness for soft chancre, for which there were 12 admissions, and 1·14 men constantly sick, the total admission ratio for primary venereal sores amounted to 70·9 per 1,000, which, compared with the previous year's rate and that of the decennial average, shows a decrease of 7·0 in the former and 9·4 in the latter. *Secondary syphilis*, with 13 admissions, gave a ratio of 23·1 per 1,000, which is lower than the previous year's rate by 15·0, and than the decennial average ratio by 18·3. *Gonorrhœa*, which caused 71 admissions, furnished a ratio of 125·9 per 1,000, which, compared with the previous year's and the decennial average rates, shows an increase of 34·7 and 31·1 respectively.

Including all forms of venereal diseases, the total admission rate was 219·9 per 1,000, which is higher than that for the previous year by 12·6, and than the decennial average rate by 3·4. The ratio of constant inefficiency due to these diseases amounted to 17·73, which is lower than the previous year's rate by ·13, and than the average rate by ·15.*

Parasitic Diseases furnished 7 admissions, all for scabies, equal to a ratio of 12·4 per 1,000, which shows an increase on the previous year's rate of 2·4, and on the decennial average ratio of 7·3.

Alcoholism was the cause of 2 admissions, the equivalent ratio being 3·5 per 1,000, as compared with 1·7, the ratio in 1902, and 5·0 the decennial average rate.

Rheumatism.—There were only 4 admissions under this head, giving a ratio of 7·1 per 1,000, as compared with 26·5 in 1902, and 20·9 the decennial average rate.

Debility was the cause of 6 admissions, or a ratio of 10·6 per 1,000, which is higher than the previous year's and the decennial average rates by 7·3 and 1·5 respectively.

Other General Diseases were represented by 2 admissions for non-malignant new growth, and 1 for tetanus, which terminated fatally.

LOCAL DISEASES.—*Diseases of the Nervous System* were the cause of 6 admissions, 2 for vertigo, and 1 each for chorea, epilepsy, mania, and melancholia. The ratio per 1,000, 10·6, is above the previous year's rate by ·7, and that of the decennial average by 5·3.

Diseases of the Eye, with 10 admissions, comprising 9 for conjunctivitis and 1 for ametropia, gave a ratio of 17·7 per 1,000, which shows an increase of 1·1 on the preceding year's rate, and of 8·3 on the average for the preceding ten years.

Diseases of other Organs of Special Sense gave 6 admissions, equal to a ratio of 10·6 per 1,000, showing a decrease of 25·9 in comparison with the previous year's rate, and of 4·5 as compared with the ten years' average ratio. The admissions comprised 4 for inflammation of external meatus, and 1 each for inflammation and perforation of membrana tympani.

Diseases of the Circulatory System caused 7 admissions, 5 for valvular disease and 2 for disordered action of heart, equal to a ratio of 12·4 per 1,000, and shows a decrease of 2·6 in comparison with the rate for the preceding year, but an increase as compared with the decennial average rate of 4·7.

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* There was no admission for ulcer of penis of non-venereal origin.

Diseases of the Respiratory System were the cause of 11 admissions, or a ratio of 19·5 per 1,000, which is higher than the rate given in 1902 by 1·3, but is slightly below (·7) the decennial average rate. Of the cases, 10 were for bronchitis and 1 for pleurisy. *Jamaica.*

Diseases of the Digestive System were the cause of 28 admissions, giving a ratio of 49·7 per 1,000, as against 63·0 in 1902, and 65·1 the decennial average rate. The causes of admission were dyspepsia 10 cases, affections of the mouth and throat 8, diarrhœa 4, inflammation of intestines 2, jaundice 2, and colic and piles 1 case each.

Diseases of the Lymphatic System, with 23 admissions, gave a ratio of 40·8 per 1,000, which is above the previous year's and decennial average rates by 10·9 and 10·3 respectively. All the admissions were returned as inflammation of the lymphatic glands.

Diseases of the Urinary System with 2 admissions caused a ratio of 3·5 per 1,000, as compared with *nil* in the preceding year, and 1·0 the decennial average rate. There was 1 death, due to acute nephritis.

Diseases of the Generative System.—Under this head 15 admissions were recorded, the equivalent ratio being 26·6 per 1,000, showing a decrease of 26·5, as compared with the previous year's rate, and of 4·0 in comparison with that of the average. In addition to the 12 cases of soft chancre already referred to under venereal diseases, there were 2 for balanitis and 1 for orchitis.

Diseases of the Organs of Locomotion, with 14 admissions, gave a ratio of 24·8 per 1,000, which is below the rate for 1902 by 1·7, but above the decennial average rate by 11·8. Synovitis caused 9 of the admissions, myalgia and inflammation of bursæ 2 each, and ostitis 1 admission.

Diseases of the Connective Tissue were the cause of 20 admissions, or a ratio of 35·5 per 1,000, showing a decrease as compared with the previous year's rate of 4·3, but an increase on that of the decennial average by 7·8. The admissions comprised 15 cases of abscess and 5 of inflammation.

Diseases of the Skin, with 21 admissions, gave a ratio of 37·2 per 1,000, showing a decrease of 5·9 as compared with the previous year, but an increase of 6·7 in comparison with the decennial average rate. The causes of admission were eczema 6 cases, onychia 5, ulcer 4, boil 3, and erythema, lichen, and herpes 1 case each.

INJURIES.—There were 46 admissions under this head, all for *local injuries*, equal to a ratio of 81·6 per 1,000, which shows an increase of 5·3 on the previous year's rate, but a decrease, as compared with the decennial average ratio of 23·5. Wounds caused 13 admissions, sprains 11, contusion 8, abrasions 5, fractures 3, and scalds, blistered feet and dislocation 2 each. There were no deaths.

POISONS.—Under this head there were 2 admissions, 1 of which was due to alcohol and 1 to poisoned wound. Both cases recovered.

SURGICAL OPERATIONS.—These were 12 in number, 3 were for excision or extirpation of inguinal glands, 3 removal of toenail on account of onychia, 2 evacuation of abscess, 1 for varix, 1 extirpation of mammary gland on account of abscess, 1 urethrotomy, and 1 excision of finger joint. Chloroform was the anæsthetic used in each instance.

INVALIDING.—The number of men invalided home from Jamaica was 13, equal to a ratio of 23·05 per 1,000, which is less than the previous year's rate by 28·36, and than the average rate by 6·56. Of the men invalided 8 belonged to No. 47 Company, Royal Garrison Artillery, giving a ratio of 50·00 per 1 000, and 5 to the 3rd Battalion Lancashire Fusiliers, equal to a ratio of 20·49 per 1,000. With regard to age, 7 men, or 21·41 per 1,000, were between 20 and 25 years; 2 men, or 15·63 per 1,000, were between 25 and 30 years; 2, or 30·77 per 1,000, were between 30 and 35 years; and 2 men, or 68·97 per 1,000, were between 35 and 40 years of age. As to service in the Command, 3 men, or 20·69 per 1,000, had under one year's service, and 10 men, or 25·97 per 1,000, were in their second year of service in the Command. In 1902 the highest rate was, as in the year under review, among men in their second year in the Command.

Jamaica.

The causes of invaliding were 5 for valvular disease of heart, 3 for secondary syphilis, and 1 each for debility, mania, melancholia, perforation membrana tympani, and abscess.

There were 11 men discharged the service during the year as medically unfit, the equivalent ratio being 19·50 per 1,000, which is lower than the rate for the previous year by 10·35, but higher than the decennial average rate by 5·64. The causes of discharge were valvular disease of heart 3, melancholia 2, and 1 each for mania, secondary syphilis, inflammation of membrana tympani, deafness, disordered action of heart, and abscess of connective tissue.

Officers.—The average strength of officers was 61, and there were 66 cases of illness with 2 deaths, giving ratios of 1,082·0 and 32·79 per 1,000 respectively, the admission rate showing an increase of 677·7 on that of the previous year. Malarial fevers, digestive disorders, and local injuries caused the majority of the admissions. One of the deaths was due to yellow fever; and the other to enteric fever, while the officer was on leave in America. An officer was invalided to England for change after enteric fever.

Women.—The average strength of women was 60, and there were 62 cases of sickness, largely due to debility, malarial fevers and digestive disorders. The ratio per 1,000, 1033·3 is above the previous year's rate by 213·3.

Children.—The average strength was 105, and there were 87 cases of sickness, of which remittent fever accounted for 17, bronchitis 21, digestive disorders 12, and debility 7. There were 3 deaths recorded, 1 each for remittent fever, inherited syphilis, and inflammation of stomach.

Vaccination.—Out of 17 soldiers re-vaccinated, 9 had perfect results, 5 were modified and 3 were failures, and 3 primary vaccinations also resulted in failure. Of 5 women re-vaccinated all gave perfect results; and out of 21 primary vaccinations among children, 20 had perfect results, failure only resulting in one instance. The lymph used was supplied by the Army Vaccine Institute, Aldershot.

II.—Non-European Troops.

The average strength of non-commissioned officers and men, exclusive of European sergeants, was 1,175, and comprised the Jamaica Company Royal Artillery, the West India Submarine Mining Company and the West India Fortress Company Royal Engineers, the 1st Battalion and detachments of the 2nd and 3rd Battalions West India Regiment, Depôt West India Regiment, and Staff and Departments. These were distributed at Up Park Camp 1,010, and Port Royal 165.

The following table shows the admission, mortality and invaliding rates, &c., among the non-European non-commissioned officers and men:—

1903. Average Strength.	Admissions.	Deaths.			Invalids.		Average constantly Sick.	Ratio per 1,000 of Strength.				
		In the Command.	Of Invalids.	Total.	Sent Home.	Finally Discharged.		Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
1,175	10·22	11	—	11	—	55	68·73	869·8	9·36	—	46·81	58·49

In comparison with the preceding year, the ratio of admission has decreased by 407·3; the mortality rate has increased by 8·52, and the ratio of constantly sick has decreased by 10·42; and in comparison with the average decennial period, the admission ratio shows a decrease of 352·7, that of constantly sick a decrease of 20·47, while the death rate shows an

increase of ·11. The average sick time to each soldier was 21·35 days, showing a decrease as compared with the previous year of 3·80 days, and in comparison with the decennial period, of 7·47, while the average duration of each case of sickness, 24·55 days, is longer by 4·86 days and ·97 of a day in similar comparisons. *Jamaica.*

The principal statistics of sickness and mortality arranged according to the various sections of disease are shown in Abstract X.

General Diseases.—*Eruptive fevers* caused 9 admissions, 6 for cow-pox and 3 for chicken-pox, giving a ratio of 7·7 per 1,000, as against 2·5 in the previous year and 7·9 the decennial average rate.

There were no admissions for *enteric fever* or *other continued* fevers. *Dysentery* with 4 admissions gave a ratio of 3·4 per 1,000, which is below the previous year's and decennial rates by 3·3 and 21·0 respectively.

Malarial Fevers were the cause of 193 admissions, or a ratio of 164·3 per 1,000, and shows a decrease of 179·9 and 92·3 respectively, as compared with the preceding year's and decennial average rates. All were for remittent ever and 1 death occurred from this cause.

Tubercular Diseases gave 9 admissions with 5 deaths, all for tubercle of lung. The ratio of admission, 7·7 per 1000, is above the previous year's rate by 1·0, but below that of the average by 5·4.

Venereal Diseases.—For *primary syphilis* there were 91 admissions, equal to a ratio of 77·4 per 1,000, as against 105·8 in the preceding year, and 140·6 the decennial average rate. If to this be added the sickness from soft chancre, from which there were 52 admissions and 4·26 men constantly sick, the total admission ratio for primary venereal sores equalled 121·7 per 1,000, which is higher than the previous year's rate by 8·3, but below that of the decennial average by 22·5.

Secondary syphilis, with 64 admissions, gave a ratio of 54·5 per 1,000, showing an increase on the previous year's and decennial average rates to the extent of 26·0 and 16·5 respectively. *Gonorrhœa* accounted for 155 admissions, equal to a ratio of 131·9 per 1,000, which is below the previous year's rate by 38·5 and the decennial average by 25·7.

Including all forms of venereal disease, the total admission ratio equalled 308·1 per 1,000, showing a decrease in comparison with the preceding year's and decennial average rates of 4·2 and 31·7 respectively. The total amount of constant inefficiency on account of these diseases was equal to 22·55 per 1,000, which is above the rate for 1902 by 3·03, but below the average rate by 6·76.

Parasitic Diseases were represented by 20 admissions, 14 for ringworm, 5 for scabies and 1 for phthirius inguinalis, giving a ratio of 17·0 per 1,000, and showing a decrease as compared with the ratios of the previous year, and the average of the preceding ten years of 33·4 and 22·7 respectively.

Rheumatism gave 46 admissions, equal to a ratio of 39·1 per 1,000, which exceeds the previous year's rate and that of the decennial average by 19·0 and 7·3 respectively.

Debility caused only 6 admissions, or a ratio of 5·1 per 1,000, as compared with 21·0 for the previous year and 12·4 the average rate for the preceding ten years.

For *other general diseases* there were 9 admissions, equal to a ratio of 7·7 per 1,000, as compared with 10·9 the previous year's rate and 18·3 the decennial average rate. The admissions were 6 for yaws and 3 for non-malignant new growth.

Local Diseases.—*Diseases of the Nervous System* with 5 admissions, comprising 3 for paralysis and 2 for neuralgia, gave a ratio of 4·3 per 1,000, showing a decrease as compared with the previous year's and decennial average rates of 4·1 and 4·9 respectively.

Diseases of the Eye caused 16 admissions, or a ratio of 13·6 per 1,000, which is lower than the previous year's rate and that of the decennial average by 9·9 and 10·1 respectively. Conjunctivitis, iritis and myopia were the chief causes of admission.

There was no admission recorded under *diseases of other organs of special sense* in the year under review: in the previous year there were 9 cases of aural disease.

Jamaica.

Diseases of the Circulatory System.—Under this head 31 admissions are shown, equal to a ratio of 26·4 per 1,000, which is below the previous year's rate by 13·1 and that of the decennial average by ·3. The admissions comprised 16 for valvular disease, 14 for disordered action of heart and 1 for phlebitis. One death occurred from disordered action of heart.

Diseases of the Respiratory System furnished 40 admissions, giving a ratio of 34·0 per 1,000. In comparison with the previous year's and decennial average rates there is a decrease of ·4 and 13·5 respectively. Bronchial affections and pneumonia were the chief causes of admission. There were 2 deaths from pneumonia and 1 from pleurisy.

Diseases of the Digestive System contributed 91 admissions, equivalent to a ratio of 77·4 per 1,000, which, compared with the rate given in the previous year and the average rate for the preceding ten years shows a decrease of 38·5 and 3·7 respectively. Dyspepsia, affections of the mouth and throat, colic and diarrhœa furnished the majority of the admissions.

Diseases of the Lymphatic System, with 36 admissions, including 35 for inflammation and 1 for suppuration of lymphatic glands, gave a ratio of 30·6 per 1,000, which, compared with the rate for 1902, shows a decrease of 10·5, but in comparison with the decennial average rate an increase of 2·0 is observed.

Diseases of the Urinary System were represented by two admissions for cystitis, equal to a ratio of 1·7 per 1,000, which shows no change in comparison with either the previous year's or decennial average rates.

Diseases of the Generative System, with 70 admissions, gave a ratio of 59·6 per 1,000, showing an increase on the previous year's rate and that of the decennial average of 41·1 and 36·3 respectively. In additional to the 52 cases of soft chancre previously referred to under venereal diseases, there were 11 admissions for orchitis, 2 for phimosis, and 1 each for hæmorrhage of urethra, stricture of urethra, balanitis, ulcer of penis, and hydrocele.

Diseases of the Organs of Locomotion caused 11 admissions, equal to a ratio of 9·4 per 1,000, showing a decrease, as compared with the previous year's rate and that of the decennial average, of 22·5 and 2·1 respectively. The admissions comprised 7 of myalgia, 3 of synovitis, and 1 of ankylosis.

Diseases of the Connective Tissue gave 37 admissions, or a ratio of 31·5 per 1,000, and is in excess of the previous year's and average rates by 17·2 and 4·4 respectively. The cases were 23 of abscess, 13 of inflammation, and 1 of gangrene.

Under *diseases of the skin* 15 admissions were recorded, equivalent to a ratio of 12·8 per 1,000, which is lower than the ratio for 1902 by 43·5 and that of the average by 31·7. Ulcers, boils and eczema were the chief causes of admission.

INJURIES.—There were 54 admissions under this head, all for *local injuries*, giving a ratio of 45·9 per 1,000, which is below the rates for the previous year and the decennial average by 55·7 and 34·2 respectively. Wounds, sprains, and contusions contributed the majority of the cases. Under *general injuries* a death from suffocation from submersion is recorded.

SURGICAL OPERATIONS.—There were 17 operations performed during the year, amongst which were 2 for abscess of liver, 2 for radical cure of hernia, 2 for excision of glands, amputation of finger, and partial amputation of great toe. Chloroform was the anæsthetic used in all cases. All the operations were successful.

INVALIDING.—The number of men discharged the service as medically unfit during the year was 55, being at the rate of 46·81 per 1,000, which is lower than the corresponding rates in the previous year, and the average of the preceding ten years by 23·72 and 8·78 respectively. The causes of invaliding were valvular disease of the heart 15 cases, secondary syphilis 12, tubercle of lung 6, disordered action of heart 4, remittent fever 2, yaws 2, rheumatism 2, and 1 each for primary syphilis, debility, paralysis, conjunctivitis, chronic dacryo-cystitis, thrombosis, asthma, piles, cystitis, ankylosis, sprain, and wound.

WOMEN.—In an average strength of 80 there were 38 admissions, or a ratio of 475·0 per 1,000. The cases included 9 of digestive disorders, 6 of

diseases incidental to women, 5 of remittent fever, 3 of respiratory diseases, 2 each of rheumatism, debility, diseases of connective tissue and skin affections, and single admissions for various other diseases, amongst which was a case of leprosy.

CHILDREN.—In a strength of 89 there were 41 admissions, or a ratio of 460·7 per 1,000, being an increase of 3·1 on the previous year's rate. Bronchitis with 15 cases, whooping cough with 10, remittent fever 5, and digestive disorders 4 cases formed the majority of the admissions.

VACCINATION.—Of 18 cases of re-vaccination amongst recruits, 15 had perfect results, 1 a modified result, and 2 were failures. Among soldiers, other than recruits, there were 3 primary vaccinations, 1 perfect and 2 failures; and of 180 re-vaccinations 141 proved failures. Among women there were 5 cases of re-vaccination, 3 of which had perfect results and 2 were failures; and of 35 cases of primary vaccination amongst children 28 had perfect results and 7 were failures. The lymph was obtained from the Army Vaccine Institute, Aldershot.

RECRUITING.—No recruiting was carried on during the year, as the men of the disbanded 3rd Battalion, West India Regiment, were utilized to fill up the gaps in the other two battalions.

SANITARY CONDITIONS.

The Senior Medical Officer (Lieut.-Colonel W. W. Kenny, M.B., R.A.M.C.) reports that the health of the European troops has been better than in 1902. An increase in the number of admissions for malarial fevers is considered to be due to the hurricane which occurred in August, followed by a heavy rainfall.

The following are the chief points noted in connection with the sanitary condition of the several stations:—

Newcastle.—In connection with the hospital, a ward for the accommodation of two officers has been erected, and has been found most useful in the case of officers sent from the plains for change.

Port Royal.—The barrack accommodation is again reported insufficient, but during the hot months the European troops are moved to the hills, leaving sufficient room for the non-European troops left behind. Increased latrine accommodation has been provided, and a urinal has been erected near the sergeants' mess. The cess-pits attached to the cook-houses, used for catching slop water, have been filled in, and buckets fixed in concrete receptacles have been substituted. A basement under one of the huts, which for some time had been used for R.E. Stores and which formed a breeding place for mosquitoes, was cleared, thus allowing a free current of air to pass through. A concrete drain was laid from the married quarters to carry off surface water. It is remarked that Port Royal lies so low that much difficulty is experienced in getting a sufficient fall for surface water.

Up Park Camp.—A new Dean's cooking apparatus has been set up in the cook-house. Ash-bins, instead of open receptacles for refuse, have been introduced. A concrete surface drain has been laid down from the guard-room to a gully on west side of barracks, to carry off surface water. One very important service carried out during the year has been the clearing away of bush, scrub, &c., from a large tract of land in rear of the hospital, which was a well-known breeding place for mosquitoes during the rains. A water-carriage system of sewerage is to be substituted for the dry-earth system.

Jamaica. *Greenwich Ridge*, a hill station for the troops, was seriously damaged by the hurricane which occurred in August. The buildings suffered severely; the officers' mess, hospital, and several of the huts being quite demolished. These have since been all re-erected and fitted for occupation. It is satisfactory to note that, although they were fully occupied at the time, there was no casualty of any kind. A new concrete swimming bath has been constructed, which, it is said, has been a great boon to the men.

The Senior Medical Officer also reports that much has been done in the Command, in many ways, to destroy the breeding places of mosquitoes, and in addition to these efforts, mosquito curtains have been provided for the troops and families.

IX.—ON THE HEALTH OF THE TROOPS SERVING IN WESTERN AFRICA.

Sickness and Mortality.

I.—European Troops.

Western Africa.

The European troops consisted of the officers serving in the Command, the non-commissioned officers and men of the Royal Garrison Artillery and the Royal Engineers, the European non-commissioned officers of the Sierra Leone Fortress Company Royal Engineers, West India and West African Regiments, and detachments of the Royal Army Medical, Army Ordnance, and Army Pay Corps.

The following table shows the admission, mortality, and invaliding rates among these troops :—

1903. Average Strength.	Admissions.	Deaths.			Invalids.		Average constantly Sick.	Ratio per 1,000 of Strength.				
		In the Command.	Of Invalids.	Total.	Sent Home.	Finally Discharged.		Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
198	382	3	—	3	18	1	13·33	1,929·3	15·15	90·91	5·05	67·32

The admission and constantly sick rates are lower than in 1902 by 315·3 and 11·32 per 1,000, and than the average rates for the ten years 1893–1902 by 473·5 and 18·52 per 1,000 respectively. The death rate was 15·15 per 1,000, as compared with 16·30 in the preceding year, and 32·62, the ten years' average rate. The average sick time to each soldier was 24·57 days, which is shorter than in the previous year by 4·13 days and than the average for the preceding ten years by 6·76 days. The average duration of each case of sickness, 12·74 days, is shorter than in 1902 by ·05 of a day, and than the average period by ·30 of a day.

In Abstract XI is a table showing the principal statistics of sickness and mortality arranged according to the various sections of disease.

General Diseases.—There were 5 admissions for *dysentery* as compared with 1 in the preceding year. *Malarial fevers*, as usual, caused the majority of the admissions, viz., 259, of which 254 were cases of remittent fever, and the remainder were cases of ague. The ratio per 1,000 equalled 1,308·1, which is below the previous year's rate by 387·6, and that of the average of the preceding six years by 347·3. The average number constantly sick was equal to a ratio of 34·80 per 1,000, and shows a decrease of 13·19 and 15·26 respectively as compared with the previous year's and average rates. Two deaths occurred from remittent fever.

stern frica.

Venereal diseases.—Including 8 cases of soft chancre there were 40 admissions under this head, equal to a ratio of 202·0 per 1,000, as compared with 190·2 in 1902, and 177·0 the average rate for the preceding six years.

Parasitic diseases were represented by 2 admissions, 1 for tænia solium and 1 for ringworm. *Alcoholism* was represented by a single admission, and *rheumatism* also had only 1 admission. *Debility* was the cause of 11 admissions as compared with 2 in the preceding year.

LOCAL DISEASES.—Under *diseases of the nervous system* 4 admissions were recorded, 2 for neuralgia, 1 for multiple neuritis, and 1 for melancholia; the latter case proved fatal. For *diseases of the eye* 1 admission, a case of conjunctivitis is shown, and for *diseases of other organs of special sense* there was 1 case of inflammation of external meatus, while under *diseases of the circulatory system* there were 3 admissions, 2 being for phlebitis, and 1 for valvular disease of the heart. *Diseases of the respiratory system* caused 1 admission for bronchitis, and under *diseases of the digestive system* there were 21 admissions, furnishing a ratio of 106·1 per 1,000, as compared with 92·4 in 1902, and 103·6 the average for the previous six years. The admissions comprised 10 for dyspepsia, 4 for jaundice, 2 for diarrhœa, 2 for abscess of dental periosteum, and single cases of sore throat, hernia, and colic. *Diseases of the lymphatic system* contributed 2 admissions, both for inflammation of the lymphatic glands. *Diseases of the urinary system* were represented by 1 case of cystitis. *Diseases of the generative system* furnished 11 admissions, equal to a ratio of 55·6 per 1,000. In addition to 8 cases of soft chancre, already referred to under venereal diseases, there was a case each of stricture of urethra, orchitis, and epididymitis. A single admission for myalgia is recorded under *diseases of the organs of locomotion*, and under *diseases of the connective tissue* 5 admissions are shown, equal to a ratio of 25·3 per 1,000. *Diseases of the skin* furnished 5 admissions, of which 2 were for boils, and 1 for sycosis, ulcer, and whitlow respectively.

INJURIES.—There were 15 cases recorded, all for local injuries, giving an admission ratio of 75·8 per 1,000, as compared with 48·9 in the previous year, and 67·8 the average for the 6 years' period; the chief causes of admission were contusions, wounds, and sprains.

SURGICAL OPERATIONS.—These were of a minor character (5 in number), 2 for removal of cyst, 2 circumcision, and 1 opening of whitlow. Chloroform was the anæsthetic used in four instances, and cocaine in one.

INVALIDING.—The number of men invalided to the United Kingdom was 18, equal to a ratio of 90·91 per 1,000, which is higher by 47·43 than the rate given in the previous year, but lower than that of the decennial average by 90·65 per 1,000. The causes necessitating invaliding were: remittent fever 11 cases (including 4 cases of blackwater fever), debility 4 cases, and 1 each for dysentery, secondary syphilis, and valvular disease of heart respectively. One man was discharged the service as medically unfit on account of valvular disease of heart.

OFFICERS.—In an average strength of 70 there were 118 cases of sickness with 1 death. The chief causes of admission were 83 for remittent fever, and 5 each for inflammation of lymphatic glands and digestive disorders. The ratio of admission for all diseases was 1685·7 per 1,000, and that for malarial fever 1,185·7, as compared with 1,678·6 and 1,089·3 respectively in 1902. The death was due to cerebral hæmorrhage. Ten officers were invalided during the year, 9 to the Canary Islands and 1 to the United Kingdom; one of the former was subsequently invalided home. The causes of invaliding were: remittent fever 6 cases, debility 2, and dysentery and movable kidney 1 case each, the latter being sent to the United Kingdom for operation.

WOMEN AND CHILDREN.—There were only 2 women and 3 children belonging to the European troops in the Command. Among the former there were 5 cases of sickness, whilst among the latter there were 4 admissions. There was no death.

II.—Non-European Troops.

Western Africa.

The average strength of non-commissioned officers and men was 2,269. The non-European troops serving on the West Coast throughout the year consisted of the Sierra Leone Companies (2), Royal Garrison Artillery, the Sierra Leone Fortress Company, Royal Engineers, the 2nd Battalion West India Regiment, and the West African Regiment. Towards the end of November a company of Artillery was formed, called the 3rd Company West India Battalion Royal Garrison Artillery.

The admission, mortality, invaliding rates, &c., are given in the following table :—

1903. Average Strength.	Admissions.	Deaths.			Invalids.		Average constantly Sick.	Ratio per 1,000 of Strength.				
		In the Command.	Of Invalids.	Total.	Sent to West Indies.	Finally Discharged.		Admissions.	Deaths.	Invalids sent to West Indies.	Invalids finally Discharged.	Constantly Sick.
2,269	3,226	11	1	12	43	63	141·00	1421·8	5·29	18·95	27·77	62·14

The admission and constantly sick rates are higher than in 1902 by 213·0 and 11·66 per 1,000, but lower than the average rates for the preceding ten years by 194·4 and 8·24 in similar comparisons. The mortality rate is below that of the preceding year and the decennial average by 9·98 and 9·77 respectively. The average sick time to each soldier was 22·68 days, which is longer than in the preceding year by 4·26 days, but shorter than the decennial period by 3·01 days. The average duration of each case of sickness was 15·95 days, being longer than in the previous year and the average period by ·71 of a day and ·06 of a day respectively.

The principal statistics of sickness and mortality arranged according to the various sections of disease are shown in Abstract XII.

General Diseases.—*Eruptive fevers* were represented by 2 cases of cow-pox. *Other continued fevers* caused 3 admissions, all for simple continued fever. *Dysentery* gave 9 admissions, equal to a ratio of 4·0 per 1,000, which is below both the preceding year's rate and that of the decennial average by 5·4 and 3·3 respectively.

Malarial Fevers caused 1,674 admissions, equal to a ratio of 737·8 per 1,000, an increase of 326·0 on the previous year, but a decrease of 40·9, as compared with the average rate. The average number constantly sick for these fevers equalled 17·42 per 1,000, as compared with 9·34 in the previous year and 21·01 the average rate. Of the total number 1,639 were for remittent fever and 35 for ague. There was 1 death, due to remittent fever. The Senior Medical Officer remarks that "the large increase in these fevers is doubtless due to this being the first year of service on the Coast of the 2nd Battalion West India Regiment, the majority of the men of which were young soldiers. It is a well-established fact that each battalion of the West India Regiment suffers exceptionally from fever the first year of its service on the Coast."

Tubercular Diseases caused 4 admissions and 2 deaths, equal to ratios of 1·8 and ·88 per 1,000 respectively, showing a decline of 2·2 in the former and 2·26 in the latter in comparison with the previous year's rates, while compared with the decennial rates the decrease is still further marked with 7·2 and 3·19 respectively. Two of the admissions are recorded as tubercle of lung, and 2 for general tubercle, and a death is recorded under each heading.

Venereal Diseases.—*Primary syphilis* caused 11 admissions, equal to a ratio of 4·8 per 1,000, showing a decrease of 12·7 as compared with the previous year's rate, and of 34·2 in comparison with the average. If to this be added

Western Africa.

the sickness for soft chancre, for which there were 59 admissions and 4·45 men constantly sick, the total admission ratio for primary venereal sores equalled 30·8 per 1,000, which is below the previous year's rate by 30·7 and that of the average by 58·2. *Secondary syphilis*, with 61 admissions, gave a ratio of 26·9 per 1,000, which is below the rate given in 1902 by 11·7, and the average rate by 20·1. A death is recorded under this head. *Gonorrhœa* was the cause of 267 admissions, equal to a ratio of 117·7 per 1,000, which is lower than the previous year's rate by 4·0, but above the average by 2·5. Including all forms of venereal disease, the total admission ratio was 175·4 per 1,000, which is lower than the rate in the previous year and that of the average by 46·4 and 75·8 respectively. The total amount of constant inefficiency on account of these diseases was equal to 14·84 per 1,000, which is ·52 below the rate for 1902, and also lower than the average rate by 3·27.

Parasitic diseases were the cause of 29 admissions, consisting of 16 cases of ringworm and 13 of scabies. The ratio, 12·8 per 1,000, shows an increase on the preceding year's rate of 2·5, but compared with the decennial average rate a decrease of 18·7 is observed.

Rheumatism.—Under this head 90 admissions are recorded, equal to a ratio of 39·7 per 1,000, which, compared with the ratios of the previous year and decennial average shows a decrease of 1·6 and 14·6 respectively. There was 1 case of rheumatic fever.

Debility caused 11 admissions, equal to a ratio of 4·8 per 1,000, which is practically the same as the previous year's rate, and 3·8 below the decennial rate.

Other General Diseases were represented by 21 admissions, comprising 11 cases of mumps, 5 of non-malignant new growth, 2 of cyst, and 1 each of yaws, malignant new growth, and diabetes mellitus. The case of malignant new growth ended fatally.

Local Diseases.—*Diseases of the Nervous System* were the cause of 16 admissions, equal to a ratio of 7·0 per 1,000, which is 1·6 above the previous year's rate, but fractionally (·5) below the average. The cases included 7 of neuralgia, 2 each of paralysis, mania, melancholia, and mental stupor, and 1 of neuritis.

Diseases of the Eye.—Under this head there were 53 admissions recorded, giving a ratio of 23·4 per 1,000, which is in excess of the previous year's and average rates to the extent of 2·7 and 4·5 respectively. The majority of the cases (43) were for conjunctivitis.

Diseases of other Organs of Special Sense were represented by 3 cases, all due to inflammation of the external meatus.

Diseases of the Circulatory System caused 36 admissions, equal to a ratio of 15·9 per 1,000, which is higher than the ratio given in the previous year and that of the decennial average by 8·7 and 2·7 respectively. The admissions included 23 cases of disordered action and 12 of valvular disease of heart, and 1 case of phlebitis. The death of an invalid which took place at Jamaica was due to disordered action of heart.

Diseases of the Respiratory System.—There were 81 admissions recorded under this head with 4 deaths. The admission ratio, 35·7, is lower than that in 1902 by 40·6, and that of the average by 25·9. The principal causes of admission were bronchial affections, pneumonia, and pleurisy. The deaths were all due to pneumonia.

Diseases of the Digestive System.—The admissions were 100 in number, giving a ratio of 44·1 per 1,000, which is lower by 4·9 than in 1902, and by 11·8 than the average. Among the cases treated were 40 of affections of mouth and throat, 28 of diarrhœa, 10 of colic, 7 of dyspepsia, and 4 of hernia.

Diseases of the Lymphatic System caused 67 admissions, equal to a ratio of 29·5 per 1,000, or 9·1 below the preceding year's rate, and 9·6 less than the decennial average.

Diseases of the Urinary System caused 3 admissions, comprising 2 cases of Bright's disease and 1 case of acute nephritis.

Diseases of the Generative System were the cause of 140 admissions and 1 death. The admission rate, 61·7, shows a decline of 17·8 and 12·4 respectively in comparison with the previous year's rate and that of the decennial average.

In addition to the 59 cases of soft chancre already referred to under venereal diseases, there were 44 admissions for ulcer of penis, 19 for orchitis, 9 for epididymitis, 2 each for stricture of urethra, phimosis and balanitis, and 1 each for extravasation of urine, paraphimosis and hydrocele. The case of extravasation of urine proved fatal.

Diseases of the Organs of Locomotion were the cause of 24 admissions, equal to a ratio of 10·6 per 1,000, which shows a decline of 11·0 and 4·2 respectively as compared with the previous year's and decennial average rates. Eleven of the admissions were for synovitis, 5 for myalgia, 4 for ganglion, and 2 each for ostitis and bursitis.

Diseases of the Connective Tissue.—The admissions numbered 104, equal to a ratio of 45·8 per 1,000, which is 24·3 below the rate for 1902, but is fractionally higher (·6) than the decennial average rate. Forty-four cases were for inflammation of connective tissue, 59 for abscess, and 1 for elephantiasis.

Diseases of the Skin.—There were 267 admissions recorded under this head, giving a ratio of 117·7 per 1,000, which shows an increase to the extent of 49·0 and 13·5 respectively as compared with the previous year's rate and that of the decennial average. Of the admissions, 176 were caused by ulcers, 46 by eczema, 26 by boils, and 10 by whitlow.

INJURIES.—There were 145 admissions (all for *local injuries*) recorded under this heading with 1 death. The ratio of admission equalled 63·9 per 1,000, which is below the previous year's rate by 29·0, and that of the decennial average by 4·4. Of the admissions 66 were for wounds, 37 for contusions, 22 for sprains, 10 for blisters of feet, 5 for abrasions, 3 for burns and scalds, and 2 for fracture. The death was that of a soldier of the West African Regiment, who was found dead in the village of Wilberforce. An inquest was held, and the verdict returned was "Found dead in the village stabbed in the back."

SURGICAL OPERATIONS.—These were 41 in number, mainly cases of circumcision, and excision and scraping of inguinal glands. One case of fistula in ano was operated on. Chloroform was the anæsthetic used in each instance, and all resulted satisfactorily.

INVALIDING.—The number of men sent to the West Indies was 43, equal to a ratio of 18·95 per 1,000, which, compared with that of the previous year, shows an increase of 5·48, but in comparison with the decennial average rate a decline of 18·51 is observed. The principal causes necessitating invaliding were malarial fevers 11 cases, disordered action of heart 8, valvular disease of heart 7, secondary syphilis 3, debility 2, and mental diseases 2 cases.

The number of men finally discharged the service was 63, including 23 who were discharged in Sierra Leone. The ratio, 27·77 per 1,000, is higher than in the previous year by 3·07, and than the decennial average by ·30. The principal causes of discharge were disordered action of heart 9, valvular disease of heart 7, remittent fever 6, rheumatism 6, secondary syphilis 5, inflammation of glands 5, gonorrhœa 3, and non-malignant new growth and acute nephritis 2 cases each.

WOMEN AND CHILDREN.—The average strength of women was 37, and there were 37 admissions with 1 death. The ratio per 1,000 of admissions, 1,000·0, is above the rate for 1902 by 156·3. Among the admissions were 23 for remittent fever, 9 for diseases incidental to women, and single cases of rheumatism, epilepsy, mania, tonsilitis and jaundice. The death was due to epilepsy. The average strength of the children was 23, among whom there were 13 cases of sickness. The admission rate, 565·2, is below that of the preceding year by 309·8. The admissions included 5 of remittent fever, 3 of local injury, and single admissions for mumps, dysentery, inflammation of ear, bronchitis, and dyspepsia.

VACCINATION.—All vaccinations were performed with lymph supplied by the Army Vaccine Institute, Aldershot. Out of 476 vaccinations and re-vaccinations among the men 83 were perfect, 80 modified, and 313 were failures. Of 3 re-vaccinations among the women all were failures, and in 9

Western Africa.

cases of primary vaccination among the children only 1 was successful. The Senior Medical Officer remarks that great difficulty is experienced in keeping lymph in the hot and damp climate, as it rapidly deteriorated, and to this he attributes the large percentage of failures.

SANITARY CONDITIONS.

The Senior Medical Officer (Major A. A. Sutton, D.S.O., R.A.M.C.) reports that the European troops who were occupying huts at Mount Aureol Barracks had not the cubic space and superficial area which had been worked out for non-European troops, and which was considerably below the usual scale allowed for European troops in the tropics. On the arrival of No. 46 Company Royal Garrison Artillery from Gibraltar, the men were put into barracks at Tower Hill, where they got 72 square feet superficial area and 850 cubic feet of space, and this standard was recommended to be maintained. Beyond this no leading sanitary improvements affecting European troops have been effected during the year, but increased facilities for ablution have been planned and are to be carried out shortly. The surface drains at Mount Aureol have been repaired and carried further down the side of the hill, and are now satisfactory.

The new water supply to Wilberforce and Signal Hill has been completed, and is to be carried on to Murray Town Battery. A large new reservoir in connection with this supply has also been completed.

X. ON THE HEALTH OF THE TROOPS SERVING IN THE ISLAND OF ST. HELENA.

SICKNESS AND MORTALITY.

St. Helena.

The health statistics of St. Helena, which in previous years were included in the South African Command, are now shown separately. The average strength of warrant officers, non-commissioned officers, and men in the island was 405, composed of No. 97 Company Royal Garrison Artillery, a detachment of No. 43 Company, Royal Engineers, two companies of the 3rd Battalion Manchester Regiment, and detachments of the Army Service, Royal Army Medical, Army Ordnance, and Army Pay Corps.

The following table shows the admission, mortality, invaliding rates, &c., among the troops forming the garrison :—

1903. Average Strength.	Admissions.	Deaths.			Invalids.		Average constantly sick.	Ratio per 1,000 of Strength.				
		In the Command.	Of Invalids.	Total.	Sent Home.	Finally Discharged.		Admissions.	Deaths.	Invalids sent Home.	Invalids, finally discharged.	Constantly sick.
405	289	2	1	3	15	14	18·02	713·6	7·41	37·04	34·57	44·49

Comparing these ratios with those for the previous year it is found that the admission rate is higher by 57·1, while the mortality and constantly sick ratios are lower by 1·50 and ·97 respectively.

The average sick time to each soldier was 16·24 days, and the average duration of each case of sickness equalled 22·76 days, both being shorter than in the previous year to the extent of ·35 of a day in the former, and 2·51 days in the latter.

In Abstract XXXIV is a table showing these health statistics for the various corps which served in St. Helena during the year.

In the Royal Artillery, the admission and constantly sick ratios were 576·6 and 42·70 per 1,000, as compared with 595·5 and 36·63 respectively in the previous year. In the Royal Engineers these rates were 397·1 and 11·47 as against 449·0 and 20·41 in 1902. The ratios of admission, mortality, and constantly sick in the Infantry were 967·2, 16·39, and 60·93, showing increase in each instance, as compared with the previous year, to the extent of 277·7, 8·59, and 12·45 per 1,000. In the Garrison Staff and Departments the admission rate was 352·9 and that of constantly sick 14·12, showing a decrease in the former of 174·9, and in the latter of 35·88, as compared with similar ratios in 1902.

St. Helena. The sickness and mortality among the troops, arranged according to the ages of the men, are shown in the following table: —

Ages.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1.000.		
					Admissions.	Deaths.	Invaliding
Under 20 years ..	95	63	—	3	663·2	—	31·58
From 20 to 25 years	212	180	—	9	849·1	—	42·45
„ 25 „ 30 „	62	32	—	1	516·1	—	16·13
„ 30 „ 35 „	20	8	2	1	400·0	100·0	50·00
„ 35 „ 40 „	13	6	—	1	461·5	—	76·92
Over 40 years ..	3	—	—	—	—	—	—
Total .	405	289	2	15	713·6	7·41	44·49

With regard to the influence of service in the Command on sickness and mortality amongst the troops, the following table has been compiled:—

Length of Service in Command.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 1 year ..	226	209	2	10	924·8	8·85	44·5
From 1 to 2 years	119	67	—	5	563·0	—	42·02
„ 2 „ 3 „ ..	42	8	—	—	190·5	—	—
„ 3 „ 4 „ ..	8	4	—	—	500·0	—	—
„ 4 „ 5 „ ..	7	1	—	—	142·9	—	—
„ 5 „ 10 „ ..	3	—	—	—	—	—	—
Over 10 years ..	—	—	—	—	—	—	—
Total ..	405	289	2	15	713·6	7·41	44·49

In Abstract XIII is a table showing the principal statistics of sickness and mortality, &c., arranged according to the various sections of disease.

General Diseases.—Under *Eruptive fevers* there were 5 admissions, all for scarlet fever, equal to a ratio of 12·3 per 1,000, as compared with *nil* in the preceding year. The source of the infection was traced to a man of the 3rd Manchester Regiment, who had recently arrived from South Africa, and who had been ill on board ship, and transferred convalescent, for tonsillitis, afterwards developing undoubted sequelæ of scarlet fever. The precautions taken to prevent the spread of the disease were successful. *Tubercular Diseases* were represented by a single admission for tubercle of lung.

There was no admission recorded under *primary syphilis*, but soft chancre gave 4 admissions with ·19 men constantly sick, the admission ratio equalling 9·9 per 1,000. *Secondary syphilis* furnished 4 admissions, or a ratio of 9·9 per 1,000, which is higher than the previous year's rate by 4·8. *Gonorrhœa*, with 32 admissions, gave a ratio of 79·0 per 1,000, showing an increase of 16·7 on that of the preceding year. Taking all forms of venereal disease together, the total admission rate equalled 98·8 per 1,000, or 25·0 above the previous year's rate. The total amount of constant inefficiency on account

of these diseases was equal to 8·42 per 1,000, showing an increase of 3·46 as compared with the rate for 1902.* *St. Helena.*

Parasitic Diseases caused 7 admissions, 3 for phthirius inguinalis, 2 for scabies, and 1 each for ringworm and tinea versicolor; the ratio, 17·3 per 1,000, shows a decrease of 23·4 per 1,000 as compared with that of the preceding year.

Alcoholism gave 3 admissions, equal to a ratio of 7·4, or 2·3 above the previous year's rate.

Rheumatism, with 11 admissions (2 being for rheumatic fever), gave a ratio of 27·2 per 1,000, an increase of 4·3 on the rate for the preceding year.

Debility was represented by a single admission, as compared with 10 in 1902.

Other General Diseases.—There were 4 admissions for non-malignant new growth, giving a ratio of 9·9 per 1,000, as compared with *nil* in the previous year.

Local Diseases.—*Diseases of the Nervous System* (including a case each of melancholia and mental stupor) caused 6 admissions, equal to a ratio of 14·8 per 1,000, showing an increase on the previous year's rate of 4·6.

Diseases of the Eye gave 7 admissions, comprising 4 for conjunctivitis, 2 for iritis, and 1 for stye. The ratio, 17·3 per 1,000, exceeds that of the previous year by 12·2. For *Other Organs of Special Sense* there were 6 admissions, 5 for aural and 1 for nasal affections, equal to a ratio of 14·8, or 11·0 above the preceding year's rate.

Diseases of the Circulatory System, with 10 admissions, gave a ratio of 24·7 per 1,000, an increase of 17·1 on the ratio for 1902. The admissions were due to valvular disease of heart (1), angina pectoris (2, fatal), disordered action of heart (2), and varix (5). In addition to the deaths above referred to, a death occurred from ulcerative endocarditis in an invalid who had left the Command.

Diseases of the Respiratory System gave 15 admissions, comprising 10 for bronchitis, 2 for laryngitis, 2 for pleurisy, and 1 for pneumonia. The admission ratio, 37·0 per 1,000, is higher than in the previous year by 3·9.

Diseases of the Digestive System caused 57 admissions, equal to a ratio of 140·7 per 1,000, which shows an increase on the previous year's rate of 12·2. Affections of the mouth and throat were the cause of 34 admissions, dyspepsia 7, diarrhœa 4, piles 4, inflammation of intestines, hernia, and hepatic disorders 2 each, and 1 each for colic and fistula in ano.

Diseases of the Lymphatic System caused 4 admissions, giving a ratio of 9·9 per 1,000, which is higher by 8·6 than the previous year's rate. All the admissions were due to inflammation of lymph glands.

Diseases of the Urinary System gave 5 admissions, 3 for acute nephritis, and 1 each for albuminuria and incontinence of urine, equal to a ratio of 12·3 per 1,000, which is higher by 4·7 than the rate for the previous year.

Diseases of Generative System caused 12 admissions, equal to a ratio of 29·6 per 1,000, which is 11·8 above the previous year's rate. In addition to 4 cases of soft chancre, already referred to under venereal affections, the admissions comprised 5 for balanitis and 1 each for urethritis, varicocele and orchitis.

Diseases of the Organs of Locomotion caused 8 admissions, or a ratio of 19·8 per 1,000, showing an increase of 5·8 on the previous year's rate. The admissions comprised 4 for myalgia, 2 for dislocation of articular cartilage, and 1 each for synovitis and deformity of great toe. There were 3 admissions under *diseases of connective tissue*, all for abscess, equal to a ratio of 7·4 per 1,000, which is 13·0 below the rate for the previous year.

Diseases of the Skin, with 29 admissions, gave a ratio of 71·6 per 1,000, showing an increase of 33·4 as compared with the ratio for 1902. The cases

* There was no admission for ulcer of penis of non-venereal origin.

St. Helena: comprised 15 of boil, 5 of eczema, 3 each of ulcer and onychia, and 1 each of psoriasis, herpes, and whitlow.

INJURIES.—Under this head 57 admissions are recorded, equivalent to a ratio of 140·7 per 1,000, which is higher than the ratio for 1902 by 99·8. All the admissions are shown under *local injuries*, the majority being cases of wounds, sprains, contusions, blisters of feet, fractures, and abrasions.

SURGICAL OPERATIONS comprised the followings:—iridectomy (1), removal of bullet from wrist (1), operation for fistula in ano (1), removal and cauterization of piles (1), and circumcision on account of gonorrhœa (1). In 4 of the cases the results were satisfactory and the men were returned to duty; the man on whom iridectomy was performed was invalided, the sight being much diminished. Chloroform was the anæsthetic used in three instances, æther and cocaine in the other two cases.

INVALIDING.—There were 15 men invalided to England during the year, equal to a ratio of 37·04 per 1,000, which is higher by 16·68 than the rate in the preceding year. Of the men invalided 8 belonged to the Royal Artillery and 7 to the Infantry. With regard to age, 3 men or 31·58 per 1,000, were under 20 years; 9 or 42·45 per 1,000 were between 20 and 25 years; 1 man or 16·13 per 1,000 was between 25 and 30 years; 1 or 50·00 per 1,000 was between 30 and 35 years, and 1 or 76·92 per 1,000 was between 35 and 40 years of age. As to service in the Command, 10 men or 44·25 per 1,000, had less than 1 year's service, and 5 or 42·02 per 1,000, were in their second year of service in the Command. The causes of invaliding were tubercle of lung, secondary syphilis, rheumatism, epilepsy, nervous weakness, melancholia, mental stupor, perforation of membrana tympani, valvular disease of heart, disordered action of heart, varix, acute nephritis, incontinence of urine, deformity of great toe, and wounds, one case each.

There were 14 men discharged as medically unfit for further service, the ratio being 34·47 per 1,000, as compared with 25·45 in the previous year. The causes of discharge were inflammation of the hip joint 2 cases, and 1 case each on account of tubercle of lung, secondary syphilis, rheumatism, debility, epilepsy, nervous weakness, melancholia, mental stupor, inflammation, membrana tympani, caries of dentine and cementum, incontinence of urine, and wounds.

OFFICERS.—In an average strength of 14 there were 5 cases of sickness, equal to a ratio of 357·1 per 1,000, as compared with 193·5 in the previous year. The admissions comprised 1 case each of inflammation of intestines, erythema, boil, wound, and sprain.

WOMEN.—The average strength was 22, but no case of sickness is recorded.

CHILDREN.—In an average strength of 30 there were 14 admissions, or a ratio of 466·7 per 1,000, as compared with 32·3 in the preceding year. Of the admissions 5 were for whooping-cough, 2 each for debility, dyspepsia, and diarrhœa, and 1 each for eclampsia, jaundice, and scald.

VACCINATION.—There were 4 cases of re-vaccination among the men, with 1 perfect and 1 modified result, and 2 failures. Among the women there was 1 case of re-vaccination with modified result, and 8 cases of primary vaccination among the children resulted successfully. The lymph used was obtained from the Army Vaccine Institute, Aldershot.

SANITARY CONDITIONS.

St. Helena.

The Senior Medical Officer (Major C. E. G. Stalkartt, M.D., R.A.M.C.) reports that the health of the troops during the year has been very good. Quarantine regulations against the import of small-pox and plague from South Africa were rigidly enforced for a large part of the year by the Sanitary Colonial Authority on vessels arriving from Cape Town, with good results.

The following points are brought to notice in the sanitary report :—

Ladder Hill barracks and Married Quarters have been kept in good sanitary condition.

Jamestown barracks.—The barracks, with the exception of one Married Quarter, were reported by a Board of Officers as unfit for permanent occupation, and were in consequence vacated.

Deadwood Camp is situated on a flattened ridge of hills about 1,800 feet above sea level, and is constantly swept by the S.E. trade winds. The situation is described as healthy, but its exposed position renders it unsuitable for tents, there being much rain and damp to contend against.

Station Hospital.—The sanitary condition is described as satisfactory. The dry earth closets have been replaced by a complete system of water-closets. Minor alterations include repair of cement floors of mortuary and kitchen ; new roofing to the kitchen ; new guttering and repair of rain-pipes to main building ; zinc basins on a wooden slab table, to replace broken earthenware fixed basins in the ablution room of isolation ward.

The water supply, ventilation, lighting, and ablution accommodation in barracks and hospital were, on the whole, satisfactory.

XI.—ON THE HEALTH OF THE TROOPS SERVING IN THE SOUTH AFRICAN COMMAND.

Sickness and Mortality.

South Africa. The average strength of European troops in South Africa during 1903 was 27,680 warrant officers, non-commissioned officers and men. A considerable reduction took place in the earlier part of the year, chiefly due to the return of troops which had come to South Africa for the late war.

The following table shows the admission, death, invaliding and constantly sick rates amongst the troops during the year :—

1903. Average Strength.	Admissions.	Deaths.			Invalids.		Average constantly Sick.	Ratio per 1,000 of Strength.				
		In the Command.	Of Invalids.	Total.	Sent Home.	Finally Discharged.		Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
27,680	22,083	298	8	306	1,071	759	1,661·74	797·8	11·06	38·69	27·42	60·03

The average sick time to each soldier was 21·91 days, and the average duration of each case of sickness was 27·47 days. The loss by deaths and invaliding to England was 1,369 warrant officers, non-commissioned officers and men, being at the rate of 49·46 per 1,000.

In Abstract XV is a table showing the prevalence of sickness and mortality in the different districts. The highest admission ratio, 878·7 per 1,000, occurred in Cape Colony district. The next highest ratios were 865·9 per 1,000 in the Potchefstroom district, 746·7 in Natal, 780·8 in Pretoria, 770·9 in Harrismith, 747·3 in Bloemfontein, 691·2 in Standerton, and 582·9 in Middelburg (Transvaal) district.

The highest rates of mortality were 19·02 per 1,000 in the Potchefstroom district, the next, 14·37 in Natal, followed by 12·83 in Pretoria, 10·59 in Cape Colony, 10·45 in Bloemfontein, 8·04 in Standerton, 6·66 in Harrismith, and 3·69 in Middelburg (Transvaal) districts.

In the following table will be found the statistics of sickness and mortality at the various stations. Omitting stations with a strength less than 100, it will be seen that Burghersdorp occupies the first place with an admission ratio of 1,224·8 per 1,000, but the camp was only open for a short time. At stations having a strength of over 1,500, the admission ratios varied between 865·8 per 1,000 at Potchefstroom and 598·1 at Middelburg (Transvaal). The lowest admission ratio is shown by Lydenburg with 112·2 per 1,000, followed by Woodstock with 205·3 per 1,000.

Districts.	Stations.	Average Annual Strength.	Admitted into Hospital.	Died in and out of Hospital.	Ratio per 1,000 of Strength.	
					Admissions.	Deaths.
Pretoria ..	Pretoria	3,325	2,812	47	845·7	14·14
	Krugersdorp ..	994	623	6	626·8	6·04
	Pietersburg ..	202	95	5	470·3	24·75
Middelburg, T.	Middelburg, T. ..	1,921	1,149	7	598·1	3·64
	Machadodorp ..	168	142	—	845·2	—
	Barberton ..	422	265	3	628·0	7·11
	Lydenburg ..	196	22	—	112·2	—
Standerton ..	Standerton ..	1,742	1,204	14	690·6	8·04
Potchefstroom.	Potchefstroom ..	2,050	1,775	39	865·8	19·02
Bloemfontein ..	Bloemfontein ..	2,152	1,734	19	805·8	8·83
	Kroonstad ..	1,768	1,167	26	660·1	14·71
	Ladybrand ..	481	368	1	806·7	2·08
Harrismith ..	Harrismith ..	2,554	1,969	17	770·9	6·66
Cape Colony ..	Kimberley ..	172	137	2	796·5	11·63
	Mafeking ..	253	103	3	407·1	11·86
	Port Elizabath ..	63	20	—	317·5	—
	Naauwpoort ..	863	1,044	3	1,209·7	3·48
	Burghersdorp ..	129	158	3	1,224·8	23·26
	Middelburg, C. C.	2,935	2,311	35	787·4	11·93
	Wynberg ..	2,502	2,151	29	859·7	11·59
	Simonstown ..	163	98	1	601·2	6·13
	Deelfontein ..	38	39	—	1,026·3	—
	Woodstock ..	151	31	—	205·3	—
Natal	Vryheid	31	30	2	967·7	64·52
	Newcastle ..	105	73	6	695·2	57·14
	Pietermaritzburg.	794	763	17	961·0	21·41
	Mooi River ..	866	490	6	565·8	6·93
	Ladysmith ..	455	356	4	782·4	8·79
	Howick	181	89	—	491·7	—
	Umbilo	4	18	—	4,500·0	—
	Manœuvres ..	—	827	3	—	—
	Totals ..	27,680	22,083	298	797·8	10·77

outh Africa. The death rate was highest at Newcastle (strength 105—6 deaths) with 57·14 per 1,000. The lowest death rate occurred at Ladybrand with 2·08 per 1,000, Naauwpoort with 3·48 per 1,000, followed by Middelburg (Transvaal) with 3·64 per 1,000.

In Abstract XXXIV will be found the general health statistics of the different arms of the service, as well as of the individual corps which served in South Africa during the year.

The average strength of the cavalry was 5,863, and there were 4,125 admissions with 65 deaths, the average number of men constantly sick amounting to 346·91. The ratio of admissions was 703·6, that of mortality 11·09, and that of constantly sick 59·17 per 1,000. The average sick time to each soldier was 21·60 days, and the average duration of each case of sickness was 30·70 days.

The average strength of the Imperial Yeomanry was 23, and there were 29 admissions with 5 deaths and an average number constantly sick of 5·91. The average sick time to each soldier was 93·79 days, and the average duration of each case of sickness was 74·38 days.

The average strength of the Artillery was 2,418, and there were 1,885 admissions with 21 deaths, the average number constantly sick being 149·08, giving admission, death and constantly sick ratios of 779·6, 8·68 and 61·65 per 1,000 respectively. The average sick time to each soldier was 22·50 days and the average duration of each case of sickness was 28·87 days.

The average strength of the Royal Engineers was 1,192 and there were 844 admissions with 21 deaths, the average number constantly sick being 63·75, giving admission, death and constantly sick ratios of 708·1, 17·62, and 53·48 per 1,000 respectively. The average sick time to each soldier was 19·52 and the average duration of each case of sickness was 27·57 days.

The average strength of the Infantry was 13,332 and there were 10·916 admissions with 144 deaths, the average number of men constantly sick being 824·68, giving admission, death and constantly sick ratios of 818·9, 10·80 and 61·86 per 1,000 respectively. The average sick time to each soldier was 22·58 days and the average duration of each case of sickness was 27·57 days.

The average strength of the Mounted Infantry was 2,151, and there were 1,914 admissions with 23 deaths, the average number of men constantly sick being 113·98, giving admission, death and constantly sick ratios of 889·8, 10·69 and 52·98 per 1,000 respectively. The average sick time to each soldier was 19·34 days and the average duration of each case of sickness was 21·74 days.

The average strength of the Army Service Corps was 773, and there were 398 admissions with 12 deaths, the average number of men constantly sick being 31·55, giving admission, death and constantly sick ratios of 514·9, 15·52, and 40·82 per 1,000 respectively. The average sick time to each soldier was 14·90 days and the average duration of each case of sickness was 28·93 days.

The average strength of the Royal Army Medical Corps was 1,211, and there were 814 admissions with 11 deaths, the average number of men constantly sick being 55·27, giving admission, death and constantly sick ratios of 672·2, 9·08, and 45·64 per 1,000 respectively. The average sick time to each soldier was 16·66 days and the average duration of each case of sickness was 24·78 days.

The average strength of the Army Ordnance Corps was 512, and there were 229 admissions with 1 death, the average number of men constantly sick being 17·96, giving admission, death and constantly sick ratios of 447·3, 1·95, and 35·08 per 1,000 respectively. The average sick time to each soldier was 12·80 days and the average duration of each case of sickness was 28·63 days.

The average strength of the Army Pay Corps was 165 and there were 49 admissions with no death, the average number of men constantly sick being 4·60, giving admission and constantly sick ratios of 297·0 and 27·88 per 1,000 respectively. The average sick time to each soldier was 10·18 days and the average duration of each case of sickness was 34·26 days.

The average strength of the Garrison Staff was 40, and there were 53 admissions with no death, the average number of men constantly sick being 3·70, giving admission and constantly sick ratios of 1,325·0 and 92·50 per

1,000 respectively. The average sick time to each soldier was 33·76 days, and the average duration of each case of sickness was 25·48 days. *South Africa.*

The following table shows the statistics of sickness, mortality, and invaliding among the troops, according to age :—

Age.	Strength.	Admissions.	Deaths.	Invaliding.	Ratio per 1,000 of Strength.		
					Admissions.	Deaths.	Invaliding.
Under 20 years. ..	5,410	4,955	40	170	915·9	7·39	31·42
From 20 to 25 years ..	14,264	12,447	171	646	872·6	11·99	45·29
„ 25 to 30 „ ..	5,398	2,764	53	159	512·0	9·82	29·46
„ 30 to 35 „ ..	1,672	716	22	49	428·2	13·16	29·31
„ 35 to 40 „ ..	647	302	10	33	466·8	15·46	51·00
40 years and upwards	113	72	2	9	637·2	17·70	79·65
Not stated	176	827	—	8	—	—	—
Total	27,680	22,083	298	1,074*	797·8	10·77	38·80*

With regard to the influence of length of service in South Africa on the sickness, mortality, and invaliding amongst troops, the following table has been compiled. The table is constructed on returns which, however, can only be considered approximately correct, as some of the figures submitted are questionable :—

Service.	Strength.	Admissions.	Deaths.	Invaliding.	Ratio per 1,000 of Strength.		
					Admissions.	Deaths.	Invaliding.
Under 1 year	11,377	9,889	139	493	869·2	12·22	43·33
1 to 2 years	7,415	5,299	72	248	714·7	9·71	33·45
2 to 3 „	4,376	3,040	52	179	694·7	11·88	40·91
3 to 4 „	3,783	2,612	25	134	690·5	6·61	35·42
4 to 5 „	481	311	8	7	646·6	16·63	14·55
5 to 10 „	63	75	2	4	1190·5	31·75	63·49
10 years and upwards	12	12	—	1	1000·0	—	83·33
Not stated	173	845	—	8	—	—	—
Total	27,680	22,083	298	1,074*	797·8	10·77	38·80*

The sickness, mortality, and invaliding at the different ages and periods of service in South Africa are also shown in the accompanying charts.

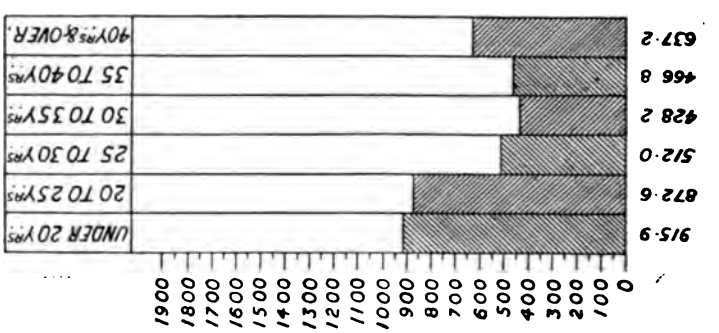
* Includes 3 invalids discharged in South Africa; excluding these the ratio is 38·69.

Africa.

AGE IN RELATION TO SICKNESS, MORTALITY AND INVALIDING.

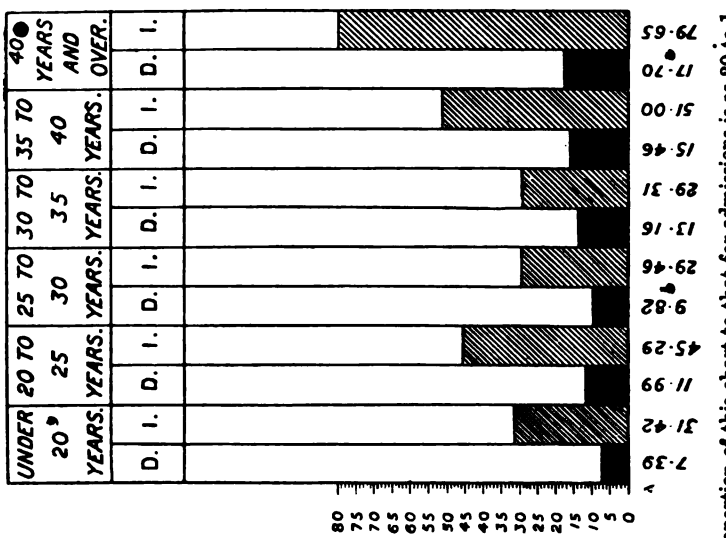
1903.

Ratios per 1,000 of Admissions.



1903.

Ratios per 1,000 of Deaths and Invalids.



The proportion of this chart to that for admissions is as 20 to 1.

SERVICE IN SOUTH AFRICA IN RELATION TO SICKNESS, MORTALITY AND INVALIDING.
1903.

Ratios per 1,000 of Admissions.

Ratios per 1,000 of Deaths and Invaliding.

The proportion of this chart to that for admissions is as 20 to 1.

South Africa. In Abstract XIV will be found a table showing the admissions, deaths, invaliding, &c., according to the classification of diseases, and in Abstract XV will be found the sickness and mortality from the same in each of the military districts in South Africa.

GENERAL DISEASES.—*Eruptive Fevers* caused 167 admissions with 3 deaths. The admissions comprised 2 cases of cow-pox, 1 case of chicken-pox, 10 cases of measles, 8 cases of rubella, 145 cases of scarlet fever with 3 deaths, and 1 case of dengue. Of the 3 deaths due to scarlet fever, 2 occurred in Cape Colony (at Middelburg and Naauwpoort), and 1 at Bloemfontein. The case of chicken-pox was admitted at Pretoria, and the case of dengue at Standerton. The cases of measles occurred at Barberton 2, Bloemfontein 2, Pretoria 1, Pietersburg 1, Wynberg 1, Simonstown 1, and Pietermaritzburg 1; and the rubella cases occurred at Barberton 4, Harrismith 3, and Pretoria 1.

Scarlet fever.—Scarlet fever developed epidemic form at Middelburg, Cape Colony (65 cases) and Bloemfontein (49 cases). A few cases were admitted at other stations as follows:—Standerton (7), Pretoria (4), Mooi River (3), Pietermaritzburg (2), Wynberg (2), Naauwpoort (1) and Potchefstroom (1).

The disease was introduced among the garrisons of South Africa by drafts from England ex transport "Dilwara," and the history of the outbreaks presents many points of interest. The "Dilwara" left Queenstown en route to Singapore viâ the Cape on 8th February, 1903. She touched at Cape Town on 1st March and at Durban on 9th March. Drafts for regiments were landed at both these ports and subsequently distributed among the following garrisons:—Middelburg, Cape Colony; Bloemfontein; Mooi River; Standerton; and Potchefstroom. Prior to the arrival of these drafts no scarlet fever existed at any of the stations mentioned.

A case of scarlet fever occurred on board the "Dilwara" on 22nd February, after a period of 14 days at sea, and this was the only case that occurred on board throughout the whole course of the voyage from Queenstown to Singapore. In addition it is stated that there was no undue prevalence of sore throats among the passengers. On recognition of the disease, every sanitary precaution was taken to check its spread on board, and further precautionary measures were adopted on arrival at Cape Town. All the bedding was sent on shore and replaced by fresh articles. The ship was fumigated, and the part used as an isolation hospital was specially disinfected and repainted.

These precautionary measures, however, did not prevent the disease appearing among the men on disembarkation. The first case was reported from Mooi River on 11th March, and occurred in a man of the 4th Battery R.F.A., who had been landed at Durban two days previously. Other cases were detected in a draft of the Devonshire Regiment at Standerton on the same day. During the same month (March), scarlet fever appeared at Middelburg, Cape Colony, and the first case was a man of the 3rd Manchester Regiment. On 3rd April a man of the 2nd Worcesters was attacked with the disease at Bloemfontein. At Potchefstroom a case of scarlet fever was diagnosed on 4th May in a man of the Mounted Infantry. All these cases disembarked from the "Dilwara" either at Cape Town or Durban. It would thus seem that the germs of infection remained dormant during the voyage and only assumed activity on disembarkation of the troops. The appearance of the disease after the lapse of 14 days at sea and its total suppression on board during the remainder of the voyage to Singapore, are points of interest.

The subsequent history of the various outbreaks in South Africa shows the infection to have been of a virulent type, and at some stations it assumed a severe epidemic form. The disease was still persistent at the close of the year.

Plague.—One fatal case of plague occurred among the troops. The patient was a R.A.M.C. orderly, doing duty at the Base Medical Stores at Durban. The source of infection could not be traced, but there were other cases among the civil population at the time.

Influenza.—There were 1,057 admissions with no deaths, giving an admission ratio of 38·2 per 1,000. The average number of men constantly sick was

51·67. The greatest number of cases occurred at Pretoria where there were 283 admissions with a ratio of 85·1 per 1,000; next in order came Cape Colony district with 282 admissions and a ratio of 38·8, followed by Harrismith with 139 admissions and a ratio of 54·4 per 1,000. The disease also appeared in slight epidemic form at Kroonstad (ratio 51·5), Potchefstroom (ratio 22·0), and Krugersdorp (ratio 42·3) during the winter months. As a rule the disease was of a mild type.

Diphtheria.—There were 10 admissions with 2 deaths, giving ratios of ·4 and ·07 per 1,000 respectively, all occurred in the Cape Colony District. The deaths occurred at Middelburg (Cape Colony). The following stations gave admissions:—Middelburg (Cape Colony) (9) and Wynberg (1).

Enteric fever.—The disease caused 1,155 admissions, with 138 deaths, including one of an invalid who had left the Command, and a constant sickness of 248·56 men. The ratio of admissions was 41·7, that of mortality 4·99, and that of constantly sick 8·98 per 1,000. The percentage of mortality to attack was 11·95. Enteric fever caused 45·97 per cent. of the deaths from all causes in the Command.

In Abstract XVI the occurrence of enteric fever at each station and in each quarter of the year is shown. The first quarter with 650 admissions and 81 deaths, followed by the fourth quarter with 245 admissions and 18 deaths, show the largest number of attacks. The second quarter came next with 234 admissions and 32 deaths, whilst there were 26 admissions and 6 deaths in the third quarter. The percentage of deaths to attacks was highest in the third quarter, followed by the second, first, and fourth quarters respectively.

The following table shows the admissions and deaths by districts. The statistics for officers, women, and children are included. No district was exempt from enteric fever, but the following stations had no cases:—Lydenburg, Mafeking, Port Elizabeth, and Simonstown.

Districts.	Warrant Officers, N.-C. Officers, and Men.					Officers.		Women.		Children.	
				Ratio per 1,000 of Strength.							
	Strength.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
Pretoria	4,521	302	31	66·8	6·86	6	2	1	—	1	—
Middelburg, Transv.	2,707	60	2	22·2	·74	1	—	—	—	—	—
Standerton	1,742	47	4	27·0	2·30	—	—	—	—	—	—
Potchefstroom ..	2,050	160	21	78·0	10·24	2	2	2	—	—	—
Bloemfontein ..	4,401	158	16	35·9	3·64	9	—	—	—	—	—
Harrismith	2,554	54	8	21·1	3·13	1	—	—	—	—	—
Cape Colony ..	7,269	278	34	38·2	4·68	4	—	1	1	3	—
Natal	2,436	91	21	37·4	8·62	4	1	—	—	1	—
Manœuvres	—	5	—	—	—	—	—	—	—	—	—
Total ..	27,680	1,155	137	41·7	4.95	27	5	4	1	5	—

The highest admission ratio was 78·0 per 1,000 in the Potchefstroom district. The Pretoria district comes next with an admission ratio of 66·8. The Cape Colony district shows the third highest admission ratio, namely, 38·2 per 1,000. The other districts show admission rates in the following order: Natal 37·4, Bloemfontein 35·9, Standerton 27·0, Middelburg (Transvaal) 22·2, Harrismith 21·1.

South Africa

The highest mortality ratio was 10·24 per 1,000 in the Potchefstroom district. The Natal district had the second highest death rate, namely, 8·62 per 1,000, followed by a mortality ratio of 6·86 in the Pretoria district. Deaths from enteric fever occurred in all the districts, but the following stations were exempt: Krugersdorp, Machadodorp, Lydenburg, Kimberley, Mafeking, Naauwpoort, and Simonstown.

The following tables and accompanying charts show, as far as possible, the influence of age and service in South Africa on the incidence of disease.

Ages.	Average Strength.	Admissions.	Deaths.	Ratio per 1,000 of Strength.	
				Admissions.	Deaths.
Under 20 years ..	5,410	190	19	35·1	3·51
From 20 to 25 years ..	14,264	751	99	52·7	6·94
,, 25 ,, 30 ,, ..	5,398	133	13	24·6	2·41
,, 30 ,, 35 ,, ..	1,672	27	5	16·1	2·99
,, 35 ,, 40 ,, ..	647	7	1	10·8	1·55
,, 40 and upwards	113	2	—	17·7	—
Not stated	176	45	—	—	—
Total.. ..	27,680	1,155	137	41·7	4·99

Age.—The largest admission rate, namely, 52·7 per 1,000, occurred among men between 20 and 25 years of age, followed by 35·1 per 1,000 for men below 20 years of age. The lowest is shown by men of 35 to 40 years of age with an equivalent ratio of 10·8 per 1,000.

The highest mortality rate is recorded for men between 20 and 25 years of age, and the lowest among men between 35 and 40 years; among men of 40 years of age and upwards no death is shown.

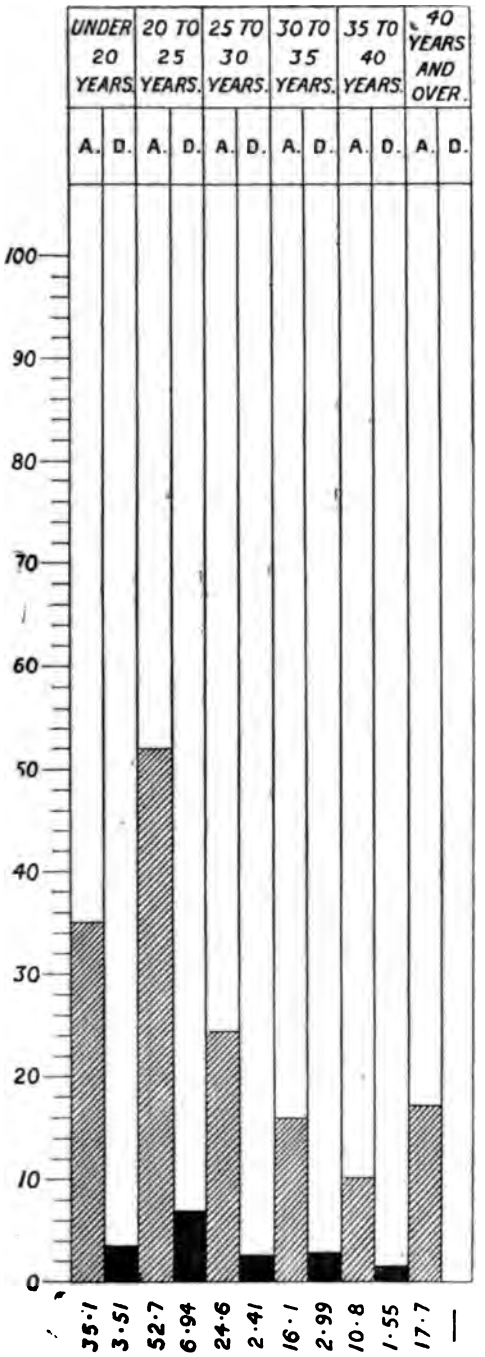
Length of Service in South Africa.	Average Strength.	Admissions.	Deaths.	Ratio per 1,000 of Strength.	
				Admissions.	Deaths.
Under 1 year	11,377	535	70	47·0	6·15
1 to 2 years	7,415	279	32	37·6	4·32
2 ,, 3 ,, ...	4,376	198	23	45·2	5·26
3 ,, 4 ,, ...	3,788	87	5	23·0	1·32
4 ,, 5 ,, ...	481	9	1	18·7	2·08
5 ,, 10 ,, ...	63	2	—	31·7	—
10 years and upwards	12	—	—	—	—
Not stated	173	45	6	—	—
Total.. ..	27,680	1,155	137	41·7	4·99

Service.—The highest admission ratio, 47·0 per 1,000, occurred amongst men of under 1 year's service in South Africa. The next, 45·2 is shown in those between 2 and 3 years' service in South Africa. This is followed by those between 1 and 2 years' service with a ratio of 37·6. The lowest

1903. *South Africa.*

AGE IN RELATION TO CASES OF ENTERIC FEVER.

Ratios per 1,000 of Strength.

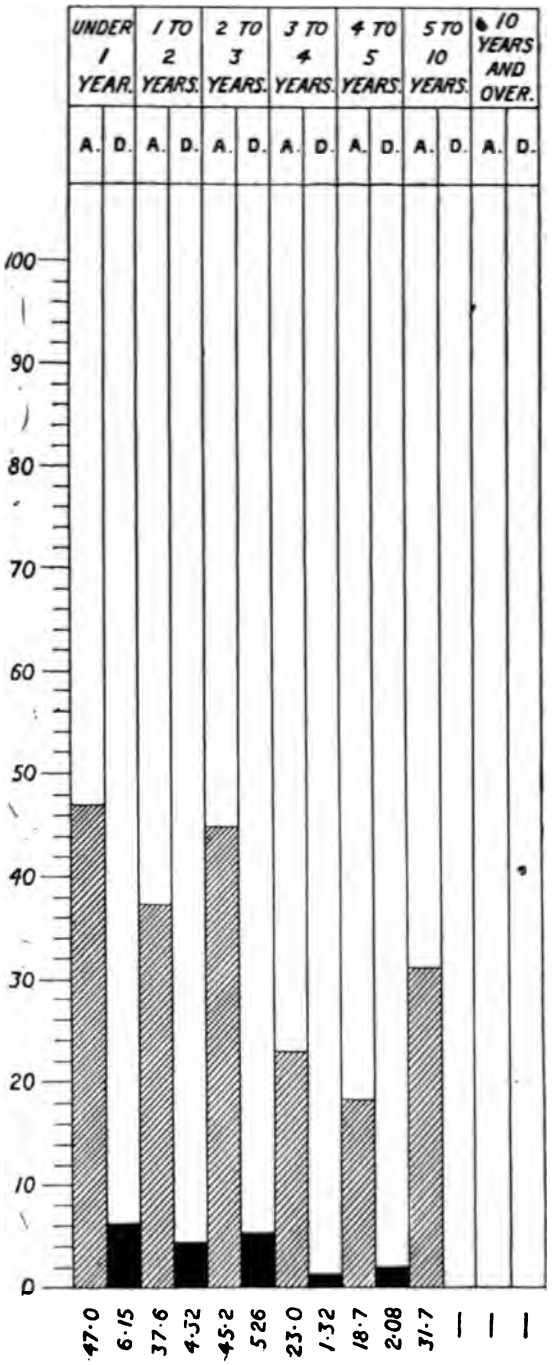


South Africa.

1903.

SERVICE IN SOUTH AFRICA IN RELATION TO CASES OF ENTERIC FEVER.

Ratios per 1,000 of Strength.



occurred in those having between 4 and 5 years' service in the country. No admissions are shown for men belonging to the 10 years' and upwards period.

The mortality ratio, 6·15, was highest in men under 1 year's service, followed by 5·26 in those between 2 and 3 years' service. The lowest, 1·32, occurred in men between 3 and 4 years' service. No deaths are recorded in those between 5 and 10 years' and 10 years' and upwards South African service.

The following are the chief points which have been noted with regard to the causation of enteric fever during the present year.

Water Supplies.—Several points of interest have been noted in connection with the water supplies of garrisons and their possible connection with the origin of enteric fever.

Bacteriological examinations have shown that sources of drinking water in South Africa are not to be depended on, and that they are liable to periodic contamination. For instance, the water supply of Pretoria, upon which the garrison mainly depended, showed the periodic presence of the *Bacillus coli communis*, particularly during the enteric fever season. The source of the municipal supply is from a series of springs in the Groenkloof Valley, and has until lately been considered of good quality, as repeated analyses, both chemical and bacteriological, confirmed that view. Adjoining springs in the same valley from which the water supply for the new Pretoria cantonments is derived also usually yielded satisfactory analyses. During the last few months of 1903, however, while a severe epidemic of enteric fever prevailed both among the garrisons of the new cantonments and in the camps around the town of Pretoria, as well as among the civil inhabitants, numerous bacteria of the colon group were found in samples of water obtained from all these springs and also from standpipes, thus probably from contamination in the catchment area. Samples from other stations have also shown this intermittent contamination.

In view of these facts arrangements were made for boiling and filtering all drinking water before issue to the troops. Unfortunately the importance of this procedure was not sufficiently recognised by some units, notwithstanding the constant supervision exercised by medical officers. More stringent disciplinary measures are required to check neglect of sanitary details and instructions, otherwise the work of medical officers in the direction of the prevention of disease is rendered ineffectual.

The method of sterilising drinking water at Standerton reached a state of perfection not approached by any other station. Special huts were erected throughout the lines for boiling and filtering drinking water, and the water, after treatment, was drawn from a pipe fitted with stop cocks outside the huts. A special staff of men was detailed to superintend this work, and all others were prohibited from entering the huts. The ordinary water supply of Standerton is muddy, and the only clear water available for drinking purposes in the regimental lines is obtained from these sterilising huts.

The officer in charge of the Army Medical Laboratory at Pretoria reports that chemical examination of 67 samples of drinking water conducted in the Laboratory during the year showed that 47 were organically polluted, and only 20 gave satisfactory results. These samples represented the drinking water supplies of the following stations:—Pretoria (12), Middelburg, Transvaal (6), Naauwpoort (4), Pietersburg (9), Middelburg, Cape Colony (8), Cape Town and Woodstock (4), Potchefstroom (2), Stellenbosch (2), Klip River (8), Maritzburg (2), Standerton (7), Burghersdorp (1), King William's Town (1), Kroonstad (1).

South Africa. Bacteriological examination of the drinking and aerated water supplies of garrisons were carried out in 59 instances. These included samples from Pretoria, Bloemfontein, Kroonstad, Standerton, and Middelburg, Transvaal. In the majority of cases gelatine plates indicated the number of microbes per c.c. to greatly exceed 100 per c.c.—the permissible limit.

The presence of the *Bacillus coli communis* was detected by anaerobic cultures in glucose formate broth in 23 instances at a time when the water was conveying enteric fever.

The Report also states that the enteric bacillus was recovered on 13 occasions from suspected waters obtained from Pretoria, Middelburg (Transvaal), Middelburg (Cape Colony), and Bloemfontein.

Aerated Waters.—During the course of the seasonal epidemic in the Pretoria garrison it was discovered that the soda-water supplied by one of the largest manufactories contained the *Bacillus coli communis*. Subsequent examination of other soda-water supplies showed the existence of similar contamination. As these mineral water factories obtained their water directly from the town mains, suspicion was at once thrown on the municipal supply as the source of contamination. On bacteriological examination however, it was discovered that the soda-water obtained from these factories possessed a higher degree of pollution than water obtained direct from taps; and, further, that in factories which used a hand method of washing bottles, the contamination was greater than in those which cleaned bottles by spray and running water. These facts indicate the dangers associated with aerated waters in the spread of disease in garrisons and towns. The question has been raised as to whether it would not be possible for the germs of disease to be conveyed to the bottle, either from the mouth or by handling, and subsequently from the bottle to the wash water in which the bottles are cleaned at the factory. In view of this possibility some officers in charge of hospitals have adopted a system of boiling empty mineral water bottles before their return to the factories.

Laboratory experiments proved that soda-water became sterile after 14 days and as far as possible the supply for the troops was issued after this period of storage.

Milk.—Milk supplies cannot be considered a common source of infection in South Africa. The expense of purchasing fresh milk places it beyond the means of the soldier, and tinned milks are thus universally used by the garrisons.

Soil Pollution.—That the condition of the surface soil has influenced the incidence of the disease in South Africa there can be little doubt. The part it has directly taken in its causation is more difficult to trace. Units that have occupied long standing and insufficiently cared-for camp sites show a greater incidence of the disease than others. In the case of the 19th Hussars at Kroonstad, a change of camp appeared to reduce the enteric incidence though it did not eradicate the disease. A similar change was carried out at Standerton with the Mounted Infantry with good results. The transfer of the Leinster Regiment to cleaner and healthier ground at Pretoria produced no effect. The change of station from Stellenbosch to Naauwpoort for the Middlesex Regiment produced beneficial results. The regiment, when at Stellenbosch, passed through a severe epidemic of enteric fever, and while still suffering from it was transferred to Naauwpoort. Shortly after arrival at their new station 4 cases (undoubtedly contracted at Stellenbosch) were admitted to hospital. Subsequently the regiment was completely free of the disease.

Latrines, &c.—Faulty construction and defective management of latrines are referred to by some medical officers as probable sources of the spread of the disease.

Under the present pail and dry earth system, the buckets are not always sufficiently approximated to the seat to prevent spillage on the ground, and in temporary latrines with uncemented floors, urine may collect in the worn away hollows or depressed surfaces where the feet naturally rest when the seat is in use.

Notice is also directed to the view that soil infected by specific germs may be carried on the boots from latrines to kitchens, barrack rooms, or tents, where food is either being cooked or consumed, and that the disease may be spread in that way.

The maintenance of a proper state of cleanliness in latrines caused a good deal of trouble at some stations. Negligence on the part of the men to throw dry earth into the pail after use was frequently reported by medical officers, and at some stations Kaffirs were engaged to do the work which the men themselves should have performed.

Importation.—A large number of cases contracted the disease at stations other than those at which they were admitted. For instance, at Naauwpoort not a single case is said to have been contracted locally, and at Maritzburg 11 out of 33 admissions were traced to other stations.

Civil surroundings.—South African towns may be divided into two portions, the part inhabited by Kaffirs and known as Kaffir locations, and the part occupied by the European inhabitants, the town proper. Kaffir locations may to some extent be concerned in the spread of enteric among the troops, but on the whole it is considered that the share taken by them is considerably less than that exercised by the European part of the towns. These locations are not extensively visited by the soldier, and the small incidence of primary venereal disease among the garrisons may be quoted as an argument in support of this. On the other hand, the inducements for visiting the town proper are more evident, and the statement is frequently made by medical officers that there is reason to believe that the disease is often contracted from the neighbouring civil population; and recently acquired knowledge of the extensively contaminated condition of aerated water supplies, gives rise to the suspicion that they may be an important means of transmitting disease.

Flies, Dust, &c.—The outbreak among the Leinster Regiment at Pretoria was suspected to be due to the conveyance of enteric contagion by flies from the sanitary farm in the proximity of the regimental camp. The Senior Medical Officer, Harrismith, attributes the spread of the outbreak at that station in some measure to the prevalence of flies, and several other medical officers remark on the possibility of the conveyance of the disease by flies and dust.

Seasonal Prevalence.—The accompanying charts show the monthly prevalence of enteric amongst the troops in South Africa during the year, and its distribution in the various districts. Enteric fever is endemic in South Africa, and, except for two or three weeks in July and August, it gave admissions amongst the garrisons throughout the year.

Generally speaking, the seasonal prevalence of the disease commences in October, at the beginning of the hot weather, and begins to decline about May, with the commencement of the cold weather. Enteric is in abeyance during the dry winter months of June, July, August, and part of September.

The association of rainfall with enteric prevalence is well marked. Usually the disease becomes prevalent shortly after the arrival of the first rains in September, and its decline is associated with the termination of the rainy season in April or in the beginning of May. With regard to rainfall the climates of the Transvaal, Orange River Colony, Natal, and the northern portions of Cape Colony are all similar. The Cape ports differ however, and there the rainy and dry seasons are the opposite to those in other parts of South Africa.

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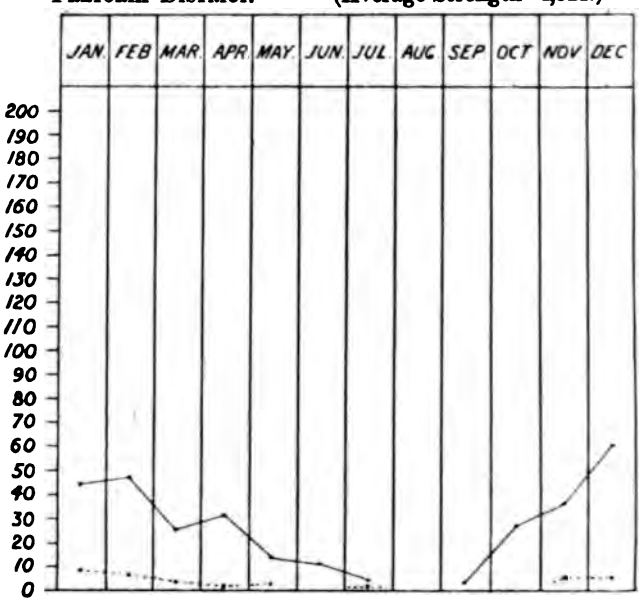
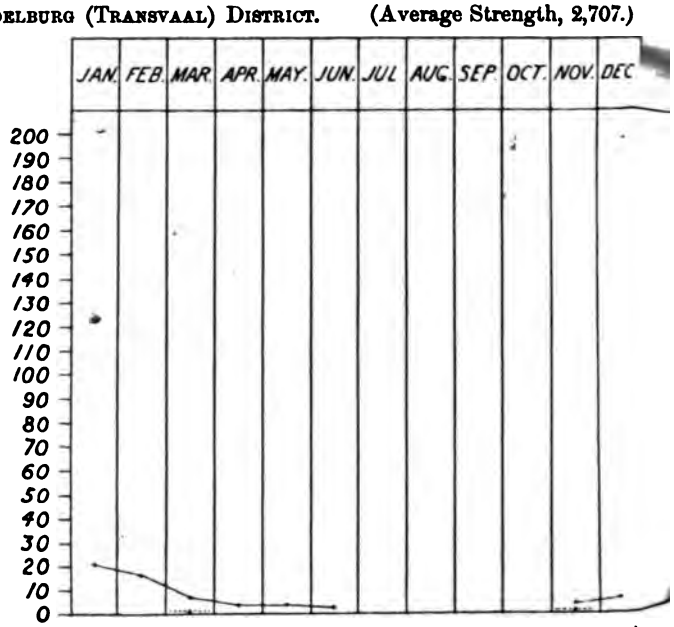
SEASONAL PREVALENCE OF ENTERIC FEVER IN SOUTH AFRICA DURING 1903.

PRETORIA DISTRICT. (Average Strength 4,521.)



ADMISSIONS	44	47	25	31	14	11	4	—	3	27	36	60
DEATHS	8	6	3	1	2	—	1	—	—	—	5	5

MIDDELBURG (TRANSVAAL) DISTRICT. (Average Strength, 2,707.)



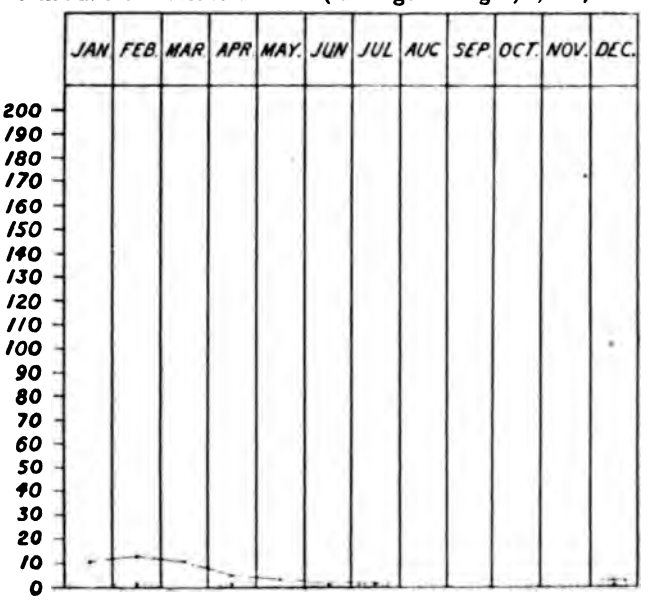
ADMISSIONS	21	16	7	3	3	2	—	—	—	—	3	5
DEATHS	—	—	1	—	—	—	—	—	—	—	1	—

Admissions shown thus ▪——▪

Deaths shown thus ▪·····▪

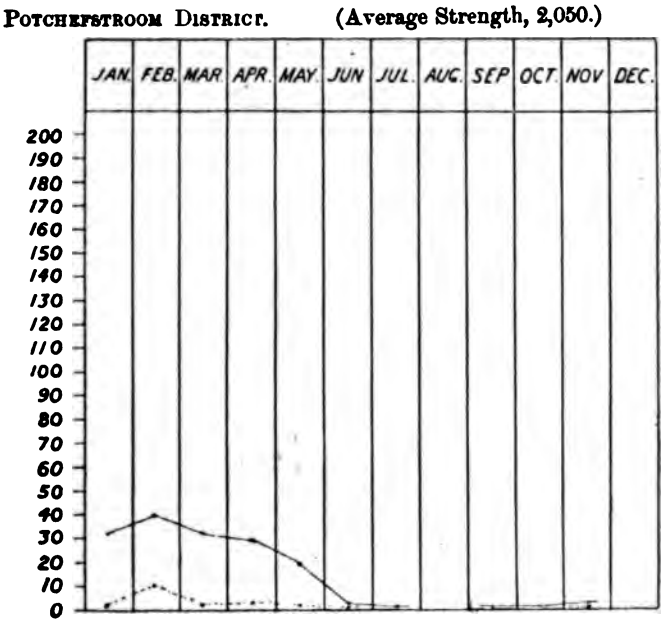
SEASONAL PREVALENCE OF ENTERIC FEVER IN SOUTH AFRICA DURING 1903.

STANDERTON DISTRICT. (Average Strength, 1,742.)



ADMISSIONS	11	13	11	5	3	1	1	—	—	—	—	2
DEATHS	—	1	—	1	—	—	1	—	—	—	—	1

POTCHEFSTROOM DISTRICT. (Average Strength, 2,050.)



ADMISSIONS	32	40	32	29	19	2	1	—	1	1	3	—
DEATHS	2	10	2	3	2	1	—	—	—	—	1	—

Admissions shown thus ———— Deaths shown thus .....

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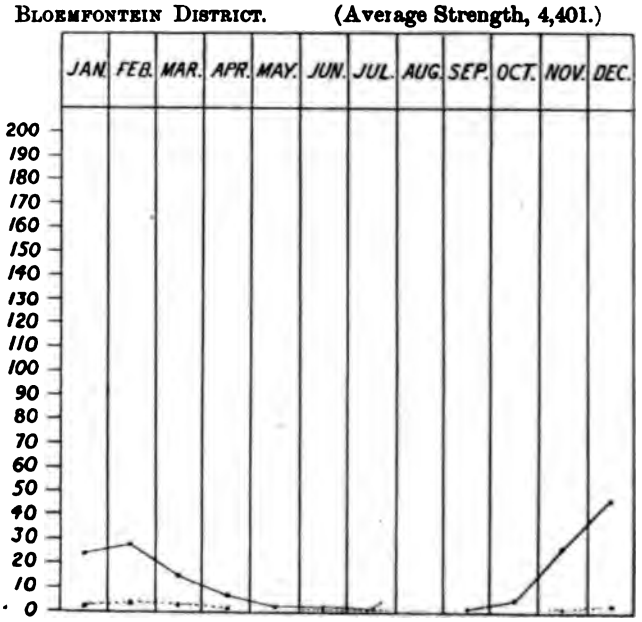
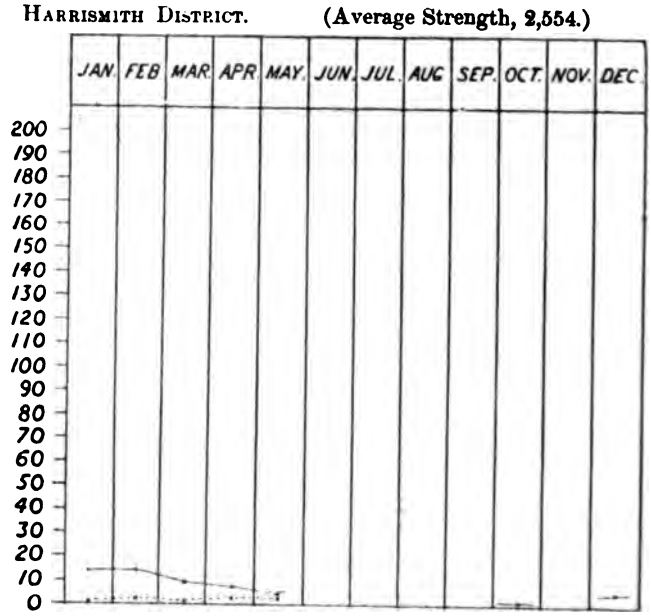
SEASONAL PREVALENCE OF ENTERIC FEVER IN SOUTH AFRICA DURING 1903.

BLOEMFONTEIN DISTRICT. (Average Strength, 4,401.)



ADMISSIONS	24	28	15	8	2	2	1	—	1	5	26	46
DEATHS	2	4	3	1	—	1	1	—	—	—	1	3

HARRISMITH DISTRICT. (Average Strength, 2,554.)



ADMISSIONS	14	14	9	7	4	—	—	—	—	1	—	5
DEATHS	1	2	1	2	2	—	—	—	—	—	—	—

Admissions shown thus •———• Deaths shown thus •.....•

SEASONAL PREVALENCE OF ENTERIC FEVER IN SOUTH AFRICA DURING 1903.

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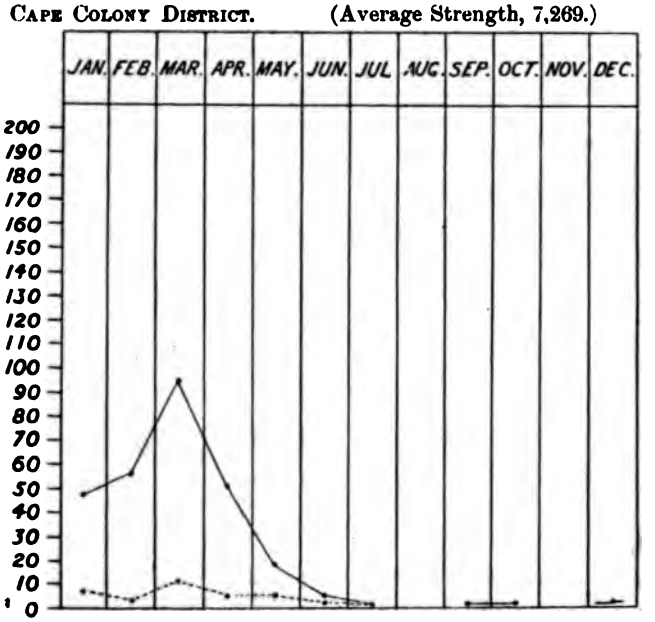
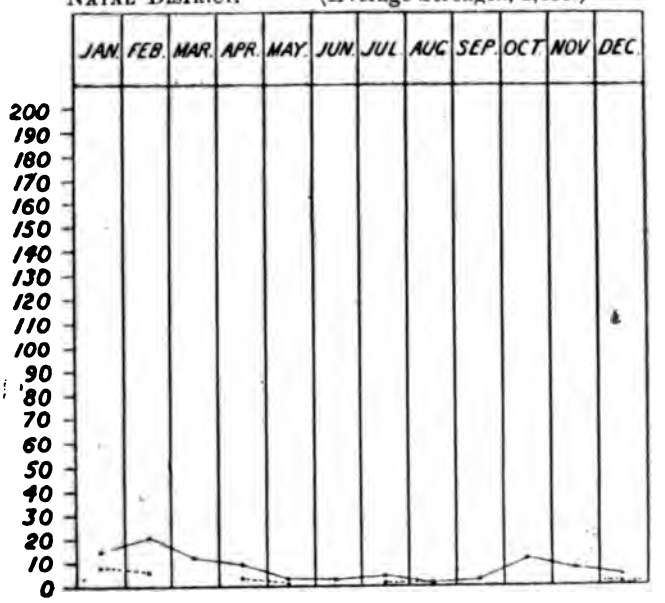
CAPE COLONY DISTRICT. (Average Strength, 7,269.)



	JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL	AUG.	SEP.	OCT.	NOV.	DEC.
ADMISSIONS	98	56	95	51	18	5	1	–	1	1	–	2
DEATHS	7	3	11	5	5	2	1	–	–	–	–	–

NATAL DISTRICT. (Average Strength, 2,436.)



	JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL	AUG	SEP.	OCT	NOV	DEC.
ADMISSIONS	15	21	12	9	3	2	4	1	2	11	7	4
DEATHS	8	6	–	3	1	–	1	1	–	–	–	1

Admissions shown thus ———— Deaths shown thus .....

South Africa. From the table on page 150 it will be seen that at Wynberg the disease existed in epidemic form during the first quarter of the year, that it declined towards the end of the second quarter, and during the third and fourth quarters only sporadic cases are recorded. Nearly all the admissions at Wynberg were received from Stellenbosch camp, and the closure of this camp in September accounted for the comparatively few admissions at Wynberg during the fourth quarter. At Stellenbosch, therefore, the prevalence of enteric coincided with the dry weather, *i.e.*, between October and April, and the disease remained dormant during the rainy season, *i.e.*, May to September, thus presenting a marked contrast to the course of the disease in other parts of South Africa.

At Pretoria there were 266 admissions with 27 deaths.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	27	42	18	27	12	10	4	—	3	27	36	60
Deaths..	5	5	3	1	2	—	1	—	—	—	5	5

The admission and mortality ratios were 80·20 and 8·12 respectively. Of the 266 admissions, 123 occurred in the last quarter, 87 in the first, 49 in the second, and 7 in the third quarter of the year.

The fourth and first quarters of the year which form the enteric season gave the largest proportions of admissions. The association of the rainfall with enteric fever prevalence is very marked in South Africa, and heavy rains at Pretoria during April would appear to have been associated with the large number of admissions in the second quarter. Bacteriological examination has frequently shown the presence of the *Bacillus coli communis* both in the drinking water supply and in aerated waters during the prevalence of enteric fever at this station; and as the result of further investigations, it will probably be found that mineral waters have exercised considerable influence on the incidence of the disease.

At Wynberg there were 162 admissions with 16 deaths.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	30	35	55	27	7	4	1	—	1	1	—	1
Deaths..	4	2	5	1	2	1	1	—	—	—	—	—

The admission and mortality ratios were 64·7 and 6·39 respectively. Of the total admissions 120 occurred in the first quarter followed by 38 in the second, whereas the third and fourth quarters only show 2 cases each. The large number of admissions during the first and second quarters is accounted for by the occupation of Stellenbosch camp from which nearly all the admissions were received at Wynberg. This unhealthy and insanitary camp was evacuated on 1st September, and consequently the usual rise was not observed in the last quarter.

At Potchefstroom there were 160 admissions and 21 deaths, giving admission and mortality ratios of 78·0 and 10·24 respectively.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	32	40	32	29	19	2	1	—	1	1	3	—
Deaths..	2	10	2	3	2	1	—	—	—	—	1	—

The first quarter of the year showed 104 admissions followed by 50 in the second, 2 in the fourth, and 4 in the third. The excessive admissions during the first and second quarters were associated with defective sanitation in barracks. The troops were transferred from canvas to incomplete cantonment hutments. Constructional deficiencies in the lines, combined with insufficient attention to conservancy arrangements led to an insanitary state of the occupied area. Subsequent representations improved these conditions and was followed by a decrease in the incidence of enteric at this station.

At Middelburg, Cape Colony, there were 95 admissions and 16 deaths giving admission and mortality ratios of 32·4 and 5·45 respectively.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	10	19	35	20	9	1	—	—	—	—	—	1
Deaths..	1	1	6	4	3	1	—	—	—	—	—	—

The first quarter of the year showed 64 admissions followed by 30 in the second, 1 in the fourth, and none in the third quarter. At this station the incidence of enteric during the first quarter is attributed chiefly to the water supply which at this time was mainly obtained from the town. Latterly a good supply of water has been obtained from bore-holes.

At Kroonstad there were 79 admissions and 13 deaths, giving admission and mortality ratios of 44·7 and 7·35 respectively.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	5	20	3	3	1	—	—	—	1	1	20	25
Deaths..	1	4	3	1	—	1	—	—	—	—	1	2

uth Africa.

TABLE SHOWING THE WEEKLY PREVALENCE OF ENTERIC FEVER

	JANUARY.				FEBRUARY.				MARCH.				APRIL.					MAY.				JUNE.			
	8	15	22	29	5	12	19	26	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25
Pretoria ...	6	4	4	10	6	8	10	13	10	3	5	5	3	4	10	7	5	2	5	4	...	5	3	3	...
Krugersdorp	1	1	1	1	...	2	1	...	1	1	1	3	...	1	1	1	...	...	1	1	...	...	...	1	...
Pietersburg	11	2	...	...	...	1	1	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...
Middelburg, T.	1	2	...	1	1	2	1	3	...	2	1	1	2	...	...	1	1	...	1	...	...	2	...	2	...
Machadodorp	5	3	7	1	1	1	3	4	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lydenburg...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Barberton ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Standerton...	3	1	2	5	5	2	5	1	2	1	2	6	1	3	1	...	...	2	1	...	...	...	1	...	...
Potchefstroom	5	6	5	11	13	14	7	8	9	5	7	7	7	8	6	6	7	11	4	3	2	2	1	...	...
Bloemfontein	5	8	3	2	2	...	4	3	3	3	4	2	1	2	...	2	...	...	1	...	...	...	...	1	...
Kroonstad ...	...	...	1	1	7	7	2	6	1	3	...	...	...	...	1	1	1	1	...	...	...	...	...	...	...
Ladybrand	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Harrismith	4	3	1	3	8	3	2	4	3	1	2	1	2	3	1	2	1	3	...	1	...	...	...	...	...
Kimberley ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
Mafeking ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Port Elizabeth	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Naauwpoort	...	1	...	...	...	...	...	...	...	...	...	1	2	...	1	...	...	...	1	...	...	...	...	...	...
Burghersdorp	...	...	1	...	...	...	1	1	...	...	1	1	1	...	...	...	2	...	...	...	...	...	...	...	...
Middelburg, C. C.	1	1	2	5	5	5	4	4	2	8	9	11	7	2	7	7	4	1	4	2	1	2	...	...	...
Wynberg ...	6	10	9	5	5	8	5	13	9	11	12	16	11	5	12	2	8	2	2	2	...	3	2	...	...
Simonstown	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Deelfontein	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Woodstock ...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vryheid ...	1	1	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Newcastle ...	...	3	1	2	...	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pietermaritzburg...	1	1	...	1	3	1	2	3	1	...	1	1	...	...	1	1	...	2	...	...	...	...	...	...	...
Mooi River...	...	...	...	...	...	...	...	5	5	2	...	2	2	3	...	4	...	1	...	...	...	...	...	...	...
Ladysmith...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Howick ...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Umbilo ...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS...	51	50	40	50	56	57	49	70	48	40	45	58	39	31	41	35	30	25	21	13	3	14	7	7	...

T THE VARIOUS STATIONS IN SOUTH AFRICA DURING 1903. *South Africa*

JULY.				AUGUST.				SEPTEMBER.				OCTOBER.					NOVEMBER.				DECEMBER.					TOTALS.
9	16	23	30	6	13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26	3	10	17	24	31	
2	1	1	...	1	...	...	...	...	1	1	1	...	...	2	3	7	9	18	6	2	16	6	10	13	13	18	266
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	19
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	27
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	27
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...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	47
...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	3	...	...	...	...	160
...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	3	2	...	3	2	5	1	3	10	78
...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	1	3	2	5	10	9	4	6	5	79
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
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...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	162
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...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	2	...	2	2	1	1	...	1	...	1	33
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	3	...	...	...	1	...	...	...	...	2	32
1	1	1	1	...	...	...	1	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
4	2	3	2	3	...	...	...	1	1	1	3	2	1	4	6	11	15	25	13	6	27	26	26	20	23	43	1,150

South Africa. The fourth quarter shows the largest number of admissions, namely, 46, followed by the first with 28, the second with 4, and the third with 1. The excessive incidence of the disease during the fourth quarter is attributed to the dual water supply. The drinking water supply came from wells, and the washing water from the river Valsch. The latter was the more accessible, and there is great probability that it was frequently used for drinking purposes. Subsequent boiling was inadequately carried out. Latterly a stricter supervision has been exercised over the boiling processes and a steam pump attached to the bore-hole, to avoid hand pumping, has been added, in order to lessen work and to facilitate filling of water carts.

At Bloemfontein there were 78 admissions and 2 deaths, giving admission and mortality ratios of 36·2 and ·93 respectively.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	19	8	12	5	1	1	1	—	—	4	6	21
Deaths..	1	—	—	—	—	—	—	—	—	—	—	1

During the first quarter of the year there were 39 admissions—in the fourth quarter 31, in the second 7, and in the third quarter only 1.

The first and last quarters include the enteric season, and thus account for the increased admissions during these periods. The water supply of Bloemfontein has always been considered unsatisfactory, and although the Senior Medical Officer cannot attribute any particular source for the prevalence of enteric, he suspects the infection to be water-borne.

At Harrismith there were 54 admissions and 8 deaths, giving admission and mortality ratios of 21·1 and 3·13 respectively.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	14	14	9	7	4	—	—	—	—	1		5
Deaths..	1	2		2	2	—	—	—	—	—		—

During the first quarter of the year there were 37 admissions, followed by the second with 11, and the fourth with 6. There were no admissions in the third quarter. At this station the prevalence of flies was associated with the occurrence of enteric fever, and to that association is chiefly attributed the spread of the disease. The water supply, which is derived from municipal sources, is, however, also stated to be liable to pollution.

At Standerton there were 47 admissions and 4 deaths, giving admission and mortality ratios of 27·0 and 2·30 respectively. *South Afric*

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	11	13	11	5	3	1	1	—	—	—	—	2
Deaths..	—	1	—	1	—	—	1	—	—	—	—	1

During the first quarter there were 35 admissions, followed by 9 in the second, 2 in the fourth, and 1 in the third.

Considerable attention has been paid to the means of boiling and filtering drinking water at this station, and specially constructed sterilizing houses were erected latterly for this purpose.

At Maritzburg there were 33 admissions and 8 deaths, giving admission and mortality ratios of 41·6 and 10·08 respectively.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	4	8	3	2	2	—	—	—	—	6	6	2
Deaths..	2	4	—	1	—	—	—	—	—	—	—	1

During the first quarter there were 15 admissions, followed by 14 in the fourth, 4 in the second, and none in the third. Of the above cases 11 are stated to have been imported from other stations. The drinking water is suspected as the main source of the disease. In proportion to strength the Royal Army Medical Corps and the Army Ordnance Corps suffered most. The high admission rate (78 per 1,000) among the Royal Army Medical Corps is attributed to the nature of their work and the high rate (39 per 1,000) among the Army Ordnance Corps to the presence of a dumping ground for camp refuse and urine in the vicinity of the Ordnance enclosure. Removal of the refuse, &c., was followed by a cessation of the disease among this corps.

At Mooi River there were 32 admissions and 5 deaths, giving admission and mortality ratios of 37·0 and 5·77 respectively.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	—	7	9	7	1	—	—	—	—	5	1	2
Deaths..	1	1	—	2	1	—	—	—	—	—	—	—

uth Africa. During the first quarter there were 16 admissions, followed by 8 in the second, 8 in the fourth, and none in the third. The station was vacated during the third quarter, when the garrison was transferred to Ladysmith for manœuvres. While at Ladysmith they showed 7 admissions. The drinking water supply is obtained from the Mooi river. The river water is first cleansed by precipitation with alum and is subsequently sterilized by steam. The camp site was somewhat cramped during the early part of the year, but later the camp was removed to a fresh site.

At Middelburg (Transvaal) there were 27 admissions and 1 death, giving admission and mortality ratios of 14·1 and ·52 respectively.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	4	7	6	2	3	2	—	—	—	—	1	2
Deaths	—	—	1	—	—	—	—	—	—	—	—	—

During the first quarter there were 17 admissions followed by 7 in the second, 3 in the fourth and none in the third quarter of the year. During the first part of the year the majority of the troops were under canvas and occupied old camp sites. Later the troops were moved into the new cantonments. Beneficial changes were also effected in the supply and storage of drinking water for the garrison.

At Machadodorp there were 27 admissions and no deaths, given an admission ratio of 160·7 per 1,000. All the admissions took place in the first quarter, the hospital being closed on 12th March of this year.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	17	9	1	—	—	—	—	—	—	—	—	—

Other continued fevers.—There were 287 admissions, with a ratio of 10·4, and no deaths for other continued fevers. These fevers included simple continued fever with 284 admissions and Mediterranean fever 3 admissions. The cases of Mediterranean fever occurred at Potchefstroom (2), Kimberley (1).

The highest admission ratio for simple continued fever was at Machadodorp with 65·5 per 1,000. The next highest admission rate occurred at Potchefstroom (54·1), followed by Deelfontein (26·3), Middelburg (Transvaal) (14·8), and Bloemfontein (12·9). The lowest admission ratios were at Middelburg (Cape Colony) (1·0), Mooi River (1·2), and Barberton (4·7).

The following table shows the total admissions for simple continued fever during each month of the year. It is interesting to note the rapid fall in

the admissions during the second quarter and its continuance throughout the remainder of the year.

January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
67	84	53	16	18	6	5	8	2	13	7	5	284

Dysentery.—There were 658 admissions with 23 deaths, including that of an invalid who died after arrival in England. The admission and mortality ratios were 23·8 and ·83 per 1,000 respectively. The average number of men constantly sick was 57·45 giving a constantly sick ratio of 2·08 per 1,000.

Abstract XVII shows the prevalence of the disease in each district in South Africa, and Abstract XVIII its prevalence in each quarter of the year.

The highest admission ratio was 34·6 per 1,000 in the Potchefstroom district. The Pretoria district came next with a ratio of 33·0 followed by the Bloemfontein district with a ratio of 31·4 per 1,000. The lowest admission ratios were Harrismith district 5·5, followed by Standerton district 17·8. The stations showing highest admission ratios were as follows:—Machadodorp 95·2, Newcastle 85·7, Pretoria 40·9, Wynberg 40·4. Those with lowest ratios were Ladysmith 4·4, Harrismith 5·5, and Woodstock 6·6 per 1,000.

The highest death rate, namely 1·33 per 1,000, was in the Pretoria district. The next highest mortality rate, 1·15, occurred in the Standerton district, the third highest, namely 1·11, in the Middelburg (Transvaal) district. The lowest, ·41, occurred in the Natal district.

Malarial fevers.—There were 442 admissions for malarial fevers, and included 325 admissions for ague and 117 for remittent fever. There was one death under this head and an average number constantly sick of 44·20. The ratio of admissions was 16·0 per 1,000, that of mortality ·04 and that of constantly sick 1·60.

The highest admission ratio, 81·6, occurred in the Middelburg (Transvaal) district, followed by 22·4 in the Potchefstroom district, and 13·1 in Natal. The lowest admission ratio was 1·6 per 1,000 in the Harrismith district. The next lowest ratio was 3·2 in the Bloemfontein district, followed by 7·5 in the Pretoria district. The case of death, which was due to remittent fever, occurred at Barberton.

In nearly every instance the reports of medical officers state that malarial fever admissions were due to recurrent cases among men who had formerly contracted the disease elsewhere, chiefly in India. It is very doubtful whether malarial fever cases originate in the high veldt of South Africa.

Septic Diseases.—There were 92 admissions with 2 deaths. There were 89 cases of erysipelas, 2 of phagadæna, and 1 of pyæmia. The deaths were due to erysipelas and occurred at Bloemfontein and Pietermaritzburg. The admission ratio was 3·3 and the mortality ratio ·07 per 1,000. The average number of men constantly sick was 8·36 giving a constantly sick ratio of ·30 per 1,000. The stations contributing the largest admission ratios were as follows:—Pretoria 7·5, Middelburg (Cape Colony) 7·5, Pietermaritzburg 6·3, and Bloemfontein, 6·0. The lowest were Harrismith ·8, Potchefstroom 1·5, and Ladysmith 2·2.

Tubercular Diseases.—There were 74 admissions with 9 deaths, including that of an invalid after arrival in the United Kingdom, and an average number constantly sick of 31·68. The admission, death, and constantly sick ratios were 2·7, ·33, and 1·14 per 1,000. Of the total admissions for tubercular diseases, 67 were *due to* tubercle of lung and the remainder to

uth Africa. tubercle of other parts of the body. Seven deaths were due to tubercle of lung and 2, including the invalid, to general tubercle.

Of districts, Standerton furnished the largest ratio of admissions, namely 4·2, followed by Cape Colony with 4·0, Pretoria with 3·1 and Bloemfontein with 2·5.

The tubercle sanitorium which had been established early in the year at Thaba 'Nchu was closed at the end of October of this year.

Venereal Diseases.—For *primary syphilis* there were 202 admissions, giving an admission ratio of 7·3 per 1,000. The average number of men constantly sick was 22·78 and the sick ratio ·82. *Soft chancre* caused 437 admissions with an average constantly sick of 39·25. The admission ratio was 15·6 and the constantly sick ratio 1·42 per 1,000. *Primary syphilis* and *soft chancre* combined caused 639 admissions, and the average number constantly sick was 62·03, equal to ratios of 23·1 and 2·24 respectively. *Secondary syphilis* caused 447 admissions, the average number constantly sick being 59·30. The admission and constantly sick ratios represented 16·1 and 2·14 per 1,000. *Gonorrhœa* caused 888 admissions, giving a ratio of 32·1, while the average number of men constantly sick was 82·23 with a ratio of 2·97 per 1,000.

For all forms of venereal disease the total admissions were 1,970, giving a ratio of 71·4 and the constantly sick number was 203·56, giving a ratio of 7·35 per 1,000. The average duration of each case in hospital was 37·70 days and the average sick time to each soldier was 2·68 days.*

Venereal diseases were represented in the following districts in the order named :—Cape Colony with an admission ratio of 115·6, Natal district 110·8, Bloemfontein 63·3, Standerton 50·0, Potchefstroom 44·9, Harrismith 44·3, Pretoria 42·5, and Middelburg (Transvaal) 26·2.

The following stations show the highest incidence of the disease :—Pietermaritzburg (strength 794) 214·2, Kimberley (strength 172) 209·2, Wynberg (strength 2,502) 188·6, Ladybrand (strength 481) 145·5, Simonstown (strength 163) 116·5, Burghersdorp (strength 129) 116·4 and Mafeking (strength 253) 106·8. The lowest incidence occurred at Machadodorp (strength 168) 11·9, Lydenburg (strength 196) 20·4, Middelburg, Transvaal (strength 1,921) 22·4, Pietersburg (strength 202) 29·7, and Port Elizabeth (strength 63) 31·8.

Parasitic Diseases.—There were 406 admissions with no deaths. The admissions included bilharzia hæmatobia 64, tænia solium 23, ascaris lumbricoides 1, pediculis vestimenti 6, phthirius inguinalis 35, scabies 258, ringworm 17, tick-bite 1, and pulex penitrans 1, giving a ratio of 14·7 per 1,000. The highest admission ratio, 22·6, occurred in the Pretoria district, followed by the Standerton district with 19·5, and the lowest in the Middelburg (Transvaal) district with a ratio of 6·6.

The cases of bilharzia hæmatobia are reported to have been contracted elsewhere than at the station in which they were admitted, the only exception being Pretoria. The disease appears chiefly confined to the eastern and western districts of the Transvaal.

Scurvy.—There were 3 cases of this disease with no deaths. They occurred at Standerton (2) and at Potchefstroom (1). The admission ratio was ·1 per 1,000.

Alcoholism.—There were 71 admissions and 2 deaths, giving an admission ratio of 2·6 per 1,000 and a mortality ratio of ·07 per 1,000.

The highest admission ratio occurred in the Potchefstroom district 5·4, and the lowest in the Bloemfontein district, 1·1. The deaths took place at Pietersburg and Bloemfontein.

Rheumatic Affections.—There were 629 admissions and 2 deaths, of which 86 were for rheumatic fever, 542 for rheumatism, and 1 for gout. The deaths were due to rheumatic fever, and occurred at Naauwpoort and Middelburg, Cape Colony. The admission ratio was 22·7 and the death ratio ·07 per 1,000. The average number of men constantly sick was 60·92, being in the ratio of 2·20 per 1,000. The highest admission

* There were 26 admissions for ulcer of penis of non-venereal origin, with 2·56 men constantly sick. If, as in former years (prior to 1897), these cases were included with those of primary syphilis and soft chancre under the heading of primary venereal sores, the admission and constantly sick rates for all venereal diseases would equal 72·3 and 7·45 respectively.

ratio, 29·8, occurred in the Harrismith district, followed by 25·7 and 23·5 in the Bloemfontein and Cape Colony districts. The lowest ratios were 9·6 and 14·8 in the Middelburg (Transvaal) and Natal districts respectively.

Debility.—There were 432 admissions and no deaths. The admission ratio was 15·6 per 1,000. The average number constantly sick was 38·97, being in the ratio of 1·41 per 1,000. The highest admission ratio, 37·3, occurred in the Standerton district, followed by 22·3 and 16·3 in the Harrismith and Middelburg (Transvaal) districts. The lowest, namely 11·7, was in the Pretoria district.

Other general diseases caused 113 admissions and 1 death, the equivalent ratios being 4·1 and ·04 per 1,000. The admissions included mumps 16, epidemic diarrhœa 1, cyst 20, non-malignant new growths 56, malignant new growths 4, rickets 1, anæmia 8, purpura 1, diabetes mellitus 1, malposition of testicle 1, supernumary testicle 1, hæmophilia 2, and congenital malformation 1. The death was due to malignant new growth (sarcoma of the tonsils).

Local Diseases.—*Diseases of the nervous system.* There were 292 admissions and 9 deaths (including that of an invalid sent home), giving ratios of 10·6 and ·33 per 1,000.

The diseases included neuritis 14, multiple neuritis 9, inflammation of spinal cord 2, degeneration of spinal cord 2, disseminated sclerosis 1, meningitis 2, inflammation of dura mater 1, hæmorrhage of brain 3, hyperæmia of brain 1, atrophy of brain 1, paralysis 2, paraplegia 3, local paralysis 3, tremor 1, chorea 4, torticollis 3, epilepsy 30, vertigo 11, headache 75, megrim 2, neuralgia 74, hysteria 2, nervous weakness 8, and mental diseases 38. The mental diseases included mania 5, melancholia 26, dementia 3, mental stupor 1, and delusional insanity 3. The admission ratio for mental diseases was 1·4 per 1,000 and the mortality ratio ·04. For diseases other than mental the admission ratio was 9·2 per 1,000 and the mortality ratio ·29.

The deaths were caused by meningitis 2, hæmorrhage in brain 2, inflammation of dura mater 1, atrophy of brain 1, epilepsy 1, and mania 1. The invalid died from abscess of brain.

Diseases of the Eye.—There were 453 admissions, representing an admission ratio of 16·4 per 1,000. The constantly sick ratio was 1·14 per 1,000, and the number constantly sick was 31·66 men.

The diseases included conjunctivitis 233, ecchymosis 1, œdema 2, keratitis 13, ulcer of cornea 32, opacity of cornea 2, iritis 27, choroiditis 3, glaucoma 2, optic neuritis 2, atrophy of optic nerve 1, retinitis 8, retinitis pigmentosa 1, detachment of retina 1, lenticular cataract 2, hæmorrhage of vitreous humour 1, amblyopia 6, ametropia 21, myopia 26, hypermetropia 23, astigmatism 13, presbyopia 1, diplopia 1, squint 1, stricture of puncta 2, chronic dacryo-cystitis 1, entropion 1, madarosis 1, fistula of lacrymal sac 2, abscess of lacrymal sac 1, blepharitis marginalis 11, stye 10, and abscess 1.

The highest rates were 27·6 and 16·9 per 1,000 in Pretoria and Cape Colony districts. The lowest, 9·8, occurred in the Potchefstroom district, and 11·1 in Natal district.

Diseases of Other Organs of Special Sense.—There were 510 admissions with no deaths, giving an admission ratio of 18·4 per 1,000 and a number constantly sick of 40·71 men, with a sick ratio of 1·47 per 1,000.

The admissions included inflammation of external meatus 149, abscess of external meatus 2, hæmatoma of the auricle 1, wax in the external meatus 10, inflammation of the middle ear 141, perforation of the membrana tympani 140, deafness 19, inflammation of soft parts of nose 29, epistaxis 13, and inflammation of naso-pharynx 6.

The highest admission ratio, 27·0 per 1,000, occurred in the Cape Colony district, and the lowest, 11·1, in the Middelburg (Transvaal) district.

Diseases of the Circulatory System.—There were 428 admissions and 10 deaths (the latter including an invalid who had left the Command), causing an admission ratio of 15·5 per 1,000 and a mortality ratio of ·36 per 1,000.

outh Africa. The average number constantly sick was 49·84, the equivalent ratio being 1·80 per 1,000.

The diseases comprised pericarditis 1, endocarditis 3, valvular disease of heart 102, hypertropy of heart 1, fatty degeneration 1, excessive growth of fat 1, clots in heart 1, syncope 2, disordered action of heart 233, dilatation of aorta 1, aneurysm 4, obstruction of arteries 1, phlebitis 16, thrombosis 20, and varix 41.

The highest admission ratio 25·7 occurred in the Pretoria district, followed by 17·9 and 16·4 in the Cape Colony and Natal districts. The lowest ratios 5·2 and 7·5 were in Middelburg (Transvaal) and Standerton districts.

The deaths were due to endocarditis 2, valvular disease of heart 2, fatty degeneration 2 (1 out of hospital), excessive growth of fat 1, clots in heart 1, and aneurysm 2 (including that of the invalid).

Diseases of the Respiratory System.—There were 956 admissions and 40 deaths, giving ratios of 34·5 and 1·45 per 1,000. The average number constantly sick was 71·68, being in the ratio of 2·59 per 1,000. The highest admission ratio 63·9 was in the Potchefstroom district, followed by 42·3 and 37·0 in the Harrismith and Cape Colony districts. The lowest were 21·8 and 23·5 in the Middelburg (Transvaal) and Standerton districts. The highest death ratio 3·90 was in the Potchefstroom district and the lowest ·45 in the Bloemfontein district.

The admissions included :—laryngitis 81, aphonia 5, tracheitis 1, bronchitis 507, spasmodic asthma 12, hæmoptysis 4, pneumonia 225, abscess of lung 1, phthisis 9, emphysema 1, pleurisy 103, empyema 6, and adhesions of pleura 1.

The deaths were due to bronchitis 1, pneumonia 36, hæmoptysis 1 (out of hospital) abscess of lung 1, empyema 1.

Diseases of the Digestive System.—There were 5,690 admissions and 18 deaths, including that of an invalid sent home, the equivalent ratios being 195·5 and ·61 per 1,000. The average number constantly sick was 248·32 with a sick ratio of 8·84.

The principal diseases comprised the following :—caries of dentine 322, other dental affections 124, sore throat 613, ulceration of fauces 1, inflammation of tonsils 322, diseases of the stomach 270, indigestion 228, inflammation of intestines 20, enteritis 104, typhlitis 38, colic 148, diarrhœa 769, piles 129, inflammation of liver 32, abscess of liver 12, congestion of liver 9, and jaundice 316.

The deaths were due to abscess of liver 8 and suppurative tonsillitis, inflammation of stomach, ulcer of stomach, typhlitis, internal strangulation, perforation, ulcer of intestines, obstruction, inflammation of liver, and peritonitis, 1 each.

The highest admission ratios were 237·6, 223·1, and 216·5 in the Cape Colony, Bloemfontein, and Harrismith districts, and the lowest 133·4 and 150·7 in the Middelburg (Transvaal) and Potchefstroom districts. The highest mortality ratio was 2·05 in the Natal district.

Abstract XVII shows the prevalence and mortality from diarrhœa and hepatic diseases in the several districts, and Abstract XVIII the prevalence and mortality from these diseases in each quarter of the year.

The admission ratio for diarrhœa was 27·8 per 1000. No deaths are reported. The highest admission ratio 45·1 is recorded in the Middelburg (Transvaal) district, followed by the Bloemfontein district with 41·6 per 1000. The lowest is shown for the Potchefstroom district with a ratio of 14·6. Diarrhœa was most prevalent in the last quarter of the year followed by the first, second and third quarters in the order named.

Hepatic diseases gave an admission ratio of 1·9 per 1,000 and a mortality ratio of ·29 per 1,000. The highest admission ratio 3·3 is shown in the Natal district followed by the Bloemfontein district with a ratio of 3·2 per 1,000. The lowest 1·2 are shown by the Standerton, Harrismith, and Cape Colony districts. The highest mortality ratio ·98 per 1,000 is recorded in the Potchefstroom district and the lowest ·39, in the Harrismith district. The following districts record no death :—Pretoria, Middelburg (Transvaal), Standerton, and Bloemfontein.

Diseases of the Lymphatic System.—There were 123 admissions and 1 death, that of an invalid who had left the Command, equal to an admission ratio of 4·4 per 1,000. The average number of men constantly sick was 10·86 giving a ratio of ·39 per 1,000. The highest admission ratio, 9·4, was in the Natal district and the lowest, 1·8 each in the Pretoria and Middelburg (Transvaal) districts.

The admissions comprised the following:—inflammation of lymphatic glands 117, inflammation of lymphatics 3, goître 2, and Addison's disease 1 (the death occurred from the latter disease). The cases of goître were admitted at Pretoria and Pietermaritzburg, and the case of Addison's disease at Bloemfontein.

Diseases of the Urinary System.—There were 101 admissions and 4 deaths, giving ratios of 3·6 and ·18 per 1,000 respectively. The average number of men constantly sick was 11·17 giving a ratio of ·40 per 1,000. The highest admission ratios were 5·9 and 5·5, and occurred in the Harrismith and Cape Colony districts, and the lowest, 1·5, in the Middelburg (Transvaal) district. The admissions comprised the following:—acute nephritis 23, Bright's disease 10, hæmaturia 10, albuminuria 3, cystitis 17, retention of urine 3, and incontinence of urine 35. The deaths were caused by acute nephritis (3) and Bright's disease (1).

Diseases of the Generative System.—There were 740 admissions and no deaths, giving an admission ratio of 26·7 per 1,000 and a constantly sick ratio of 2·24 per 1,000. The average number constantly sick was 62·12 men. The highest admission ratio was 52·3 in the Cape Colony district and the lowest, 5·2, in the Middelburg (Transvaal) district.

The admissions comprised the following:—stricture of urethra 19, impacted calculus 1, inflammation of prostate 2, phimosis 23, paraphimosis 16, balanitis 31, ulcer of penis 26, soft chancre 437, abscess of scrotum 2, varicocele 49, hydrocele 5, orchitis 116, epididymitis 8, spermatorrhœa 2, and inflammation of male breast 3.

Diseases of the Organs of Locomotion.—There were 532 admissions and no deaths, giving an admission ratio of 19·2 per 1,000 and a constantly sick ratio of 1·54 per 1,000. The average number constantly sick was 42·01 men. The highest admission ratio was 25·1 in the Harrismith district and the lowest, 9·0 in the Natal district.

The chief causes of admission were:—synovitis 341, diseases of bone 42, myalgia 60, flat feet 21, and hammer toe 24.

Diseases of the Connective Tissue.—There were 735 admissions and no deaths, giving admission and constantly sick ratios of 26·6 and 1·33 per 1,000 respectively. The average number constantly sick was 36·86. The highest admission ratio was 34·1 in the Cape Colony district, and the lowest, 18·4 in the Harrismith district.

The causes of admission were:—inflammation of connective tissue 245, abscess of connective tissue 488, œdema 1, and emphysema 1.

Diseases of the Skin.—There were 1,351 admissions and no deaths, giving admission and constantly sick ratios of 48·8 and 2·51 per 1,000 respectively. The average number of men constantly sick was 69·47. The highest admission ratio, 76·4, occurred in the Harrismith district, and the lowest, 36·6, in the Middelburg (Transvaal) district.

The chief causes of admission were:—erythema 17, urticaria 36, impetigo 52, psoriasis 71, herpes 27, ulcers 191, boils 361, whitlow 93, and onychia 156.

INJURIES.—There were 2,855 admissions and 38 deaths. The admission ratio was 103·1 and the death rate 1·37 per 1,000. The average number of men constantly sick was 163·75, giving a ratio of 5·92 per 1,000.

General Injuries caused 65 admissions and 12 deaths (all out of hospital). The admissions comprised burns and scalds 10, heat-stroke 15, sun-stroke 26, heat-apoplexy 2, lightning stroke 6, multiple injuries 3, and shock 3. The deaths were due to suffocation from submersion 10 (all out of hospital), suffocation from plugging of air passages with foreign substances 2 (both out of hospital). All were accidental.

uth Africa. *Local Injuries* caused 2,790 admissions and 26 deaths. The chief causes of admission were:—burns and scalds 92, abrasion 166, contusion 709, wounds 852, gunshot wounds 36, sprains 531, dislocation 51, fractures 233, and concussion of brain 37.

The deaths were due to:—wounds 1 (out of hospital); gunshot wounds 11 (8 out of hospital), suicidal 7, accidental 4; rupture of spleen 1; rupture of kidney 1; fracture of base of skull 7 (2 out of hospital); wound of neck 1 (self-inflicted, suicide); dislocation of spine 1 (out of hospital); fracture of spine 2 (1 out of hospital and 1 of an invalid sent home); and rupture of viscera 1.

There were 8 cases of suicide. Of these 7 were due to gunshot wounds and 1 to cut-throat. No motive could be assigned for any of these cases and the verdict in 4 instances was to the effect that the acts were committed whilst temporarily insane. In one case no inquest was held, in another no mention is made to this effect, and in 2 other cases the proceedings of the court merely state the cause of death without assigning any reason for the act.

Poisons caused 20 admissions and 2 deaths.

The following were the causes of admission:—ptomaine poisoning 17, cocaine poisoning 1, and nicotine poisoning 1.

The deaths were due to cocaine poisoning and tarantula poisoning. The death from cocaine occurred at Wynberg and the case of death from a tarantula spider bite at Standerton.

Surgical Operations.—The number of operations recorded for the year was 242, and of deaths following operations 16.

In accordance with the classification given in the official nomenclature of diseases the operations comprised the following:—Removal of tumours (1), of cysts (2), evacuation of abscesses (13), operations on arteries (2), on veins (19), on lymphatic organs (12), on nerves (3), on skin and subcutaneous tissues (21), on bones (20), on joints (11), on muscles and tendons (8), amputations (17), operations on face, nasal cavities, and mouth (2), dental operations (8), operations on eye and its appendages (1), excision of eye-ball (1), operations on ear (3), on larynx (4), on thorax (7), on abdomen (38), on rectum and anus (19), and on male generative organs (30).

The majority of these operations were of minor degree and require no comment. The operations on arteries included a case of ligature of the right popliteal as the result of secondary hæmorrhage following a gunshot wound. The initial operation was undertaken for the removal of a Lee-Metford bullet. In the second case ligature of arteries was carried out for a cut wrist. All the operations on veins were for treatment of varix by excision or ligature. Operations on bones were carried out mainly for necrosis and fractures. Operations on joints included several cases treated for displacement of cartilages and the removal of foreign bodies in the knee joint.

The cases of amputation chiefly included removal of fingers and toes. One case involved amputation at the hip joint as the result of pyæmic infection following an injury to the knee. Another case of amputation at the lower third of the thigh was performed for septic infection complicated by secondary hæmorrhage following a gunshot wound of the ankle joint. Abdominal operations were for the radical cure of hernia (14), abscess of the liver (11), typhlitis (9), and laparatomy for injuries and diseases of the abdominal organs (4). Operations on rectum and anus included 14 for ligature and removal of piles, and 5 for fistula in ano. The operations on the male generative organs included 5 of circumcision, 21 varicocele, 2 hydrocele, and 2 removal of testicle.

The deaths resulted after operations for the following—abscess of liver (8), typhlitis and appendicitis (2), intestinal obstruction (laparatomy, 1), laparatomy for perforation as the result of tubercular peritonitis (1), removal of spleen for injury (1), empyema (2), and wound of neck, self-inflicted (1),

Chloroform was the anæsthetic chiefly employed. Ether and cocaine were *occasionally* used, the latter for minor operations.

INVALIDING.—The total number of men invalided was 1,074, of whom 1,071 were sent home and 3 were discharged in South Africa. The invaliding ratio of the men sent home was 38·69 per 1,000. *South Africa.*

Taking the invaliding in the different arms of the service as shown in Abstract XXXIV, it was found that the invaliding ratio in the Cavalry was 37·35 per 1,000, in the Artillery 40·94, in the Royal Engineers 26·85, in the Infantry 41·93, Mounted Infantry 15·34, the Army Service Corps 34·39, the Royal Army Medical Corps 43·77, Army Ordnance Corps 29·30, Army Pay Corps 30·30, and the Garrison Staff 125·00.

The invaliding ratio was highest, 79·65 per 1,000, among men of 40 years of age and upwards, and lowest, 29·31, among men of 30 to 35 years of age; the second highest invaliding ratio, 51·00, occurred among men between 35 and 40 years of age, followed by 45·29 among men between 20 to 25, 31·42 for those under 20 years of age, and 29·46 for those between 25 to 30 years of age.

With regard to the influence of length of service in the country on invaliding, the highest invaliding ratio, 83·33 per 1,000, occurred among those of under 10 years' service and upwards, followed by those between 5 to 10 years in the country, with a ratio of 63·49. The lowest, 14·55, is shown for those between 4 and 5 years' service in South Africa.

Enteric fever caused the invaliding of the largest number of men, namely 211, giving a ratio of 7·62 per 1,000; diseases of the digestive system come next with 131 invalids (including 79 caries of dentine, 3 caries dental periostium, 9 inflammation of stomach, 2 ulcer of stomach, 7 typhlitis, 11 hernia, 6 inflammation of liver, and 3 abscess of liver), the invaliding ratio being 4·73. Diseases of the circulatory system caused the invaliding of 118 men (including 1 pericarditis, 82 valvular disease of heart, 20 disordered action of heart, 2 aneurysm, 5 phlebitis, 5 thrombosis, and 3 varix), the invaliding ratio being 4·26. Nervous and mental diseases caused the invaliding of 45 and 62 men respectively, making a total of 107 invalided for diseases of the nervous system, the combined ratio being 3·87 per 1,000. They included 2 neuritis, 2 multiple neuritis, 2 inflammation of spinal cord, 2 hemiplegia, 1 local paralysis, 2 chorea, 22 epilepsy, 2 headache, 7 nervous weakness, 8 mania, 43 melancholia, 7 dementia, and 4 delusional insanity.

There were 78 men invalided for diseases of other organs of special sense (including 22 inflammation of middle ear, 47 perforation and 1 suppuration of membrana tympani, 1 inflammation of external meatus, and 7 deafness), giving a ratio of 2·81 per 1,000. Bilharzia hæmatobia caused the invaliding of 58 men, giving a ratio of 2·07 per 1,000. Fifty-eight men were invalided for local injuries (including wounds 15, dislocations 4, fractures 30, sprain 1, compression of nerves 1, and concussion of brain 3), the ratio being 2·10. Debility caused the invaliding of 39 men with a ratio of 1·41. There were 39 men invalided for diseases of the eye (including 2 conjunctivitis, 1 opacity, 3 iritis, 3 optic neuritis, 2 atrophy of optic nerve, 6 retinitis, 4 myopia, 8 hypermetropia, and 3 astigmatism), 1·41 being the ratio per 1,000. Organs of locomotion caused the invaliding of 35 men with a ratio of 1·28 per 1,000. The following diseases were included (2 periostitis, 1 ostitis, 4 necrosis, 17 synovitis, 4 dislocation articular cartilage, 1 posterior curvature of spine, 1 lateral curvature spine, 3 flat foot, 1 deformity of great toe, and 1 hallux valgus). There were 30 men invalided to England for tubercular diseases (including 28 for tubercle of lung) giving a ratio of 1·08 per 1,000. Three cases of tubercle of lung were finally discharged in South Africa. Rheumatic affections caused the invaliding of 32 men (including 25 rheumatism and 7 rheumatic fever) giving a ratio of 1·15 per 1,000. Secondary syphilis caused the invaliding of 28 men, giving a ratio of 1·03 per 1,000, and there were 26 men invalided for dysentery the ratio being ·94 per 1,000.

There were 5 cases invalided for disease of the lymphatic system and 1 case each for influenza, pyæmia, alcoholism and diseases of the connective tissue.

There were 759 men discharged during the year as medically unfit for further service, the equivalent ratio being 27·42 per 1,000.

The principal causes of discharge were:—diseases of the circulatory system 115 cases or 4·15 per 1,000, mental diseases 94 cases or 3·40 per 1,000,

South Africa. organs of special sense 75 cases or 2·71 per 1,000, injuries 65 cases or 2·35 per 1,000, diseases of the digestive system 60 cases or 2·17 per 1,000, nervous diseases 48 cases or 1·73 per 1,000, diseases of the eye 39 cases or 1·41 per 1,000, tubercular diseases 34 cases or 1·23 per 1,000 (28 of which, including the 3 invalids discharged locally, were for tubercle of lung), organs of locomotion 25 cases or ·90 per 1,000, and diseases of the urinary system 13 cases or ·47 per 1,000.

OFFICERS.—The average strength of officers for the year was 837, the number of attacks of illness 351, the number of deaths 7, and the number invalided to England 35. The ratio of sickness was 419·4, the death rate 8·36, and the invaliding rate 43·01.

There were 4 cases of *eruptive fevers* with one death, comprising 1 case of measles and 3 cases of scarlet fever. There were 27 cases of influenza, and simple continued fever caused 8 admissions without a death.

Enteric fever gave 27 admissions with 5 deaths; 8 cases were invalided. The ratio of admission, deaths, and invaliding from this disease was 32·3, 5·97, and 9·56 respectively. The cases were distributed in the following stations:—Bloemfontein and Pretoria 6 each, Newcastle 4, Wynberg (Cape Colony) 3, Kroonstad 3, Potchefstroom 2, Middelburg (Transvaal), Harrismith, Middelburg (Cape Colony) 1 each, and the deaths occurred at Newcastle (1), Potchefstroom (2), Pretoria (2).

Dysentery gave 14 admissions, no deaths and 3 invalids, with equivalent ratios of 16·7 and 3·58 per 1,000. *Malarial fevers* contributed 18 cases with an admission ratio of 21·5. They comprised 10 cases of intermittent fever and 8 of remittent fever. One case was admitted for *erysipelas* giving an admission ratio of 1·2 per 1,000. *Gonorrhœa* caused 2 admissions with a ratio of 2·4 per 1,000. *Parasitic diseases* caused 1 admission for tick-bite or a ratio of 1·2. *Alcoholism* gave 2 admissions with a ratio of 2·4 per 1,000. *Rheumatic affections* caused 7 admissions and 2 invalids with ratios of 8·4 and 2·39 per 1,000. There were 13 admissions and 7 cases invalided for *debility* giving ratios of 15·5 and 8·36 per 1,000. Four cases of *mumps* were admitted giving a ration of 4·8 per 1,000.

Diseases of the nervous system caused 10 admissions and 2 invalids with ratios of 11·9 and 2·39 respectively. The diseases were neuritis (2), hemiplegia (1), headache (2), neuralgia (4), nervous weakness (1). There was 1 admission for general paralysis of the insane. *Diseases of the eye* caused 3 admissions, iritis (2), and diplopia (1). Two of the cases were invalided. The respective ratios were 3·6 and 2·39 per 1,000. *Other organs of special sense* gave 1 admission for inflammation of soft parts of nose. *Diseases of the respiratory system* caused 10 admissions with a ratio of 11·9 per 1,000. *Diseases of the digestive system* caused 70 admissions; 3 cases were invalided. The equivalent ratios were 83·6 and 3·58 per 1,000. The chief diseases comprised sore throat (2), tonsilitis (18), inflammation of stomach (9), typhlitis (2), diarrhœa (11), congestion of liver (5), and jaundice (9). One case was admitted for inflammation of lymphatic glands and 1 case for inflammation of bladder. *Diseases of generative system* caused 5 admissions with a ratio of 6·0 per 1,000. The admissions were phimosis (1), soft chancre (2), orchitis (2). *Diseases of the organs of locomotion* caused 9 admissions with a ratio of 10·8. The cases were necrosis (1), synovitis (6), myalgia (2). *Diseases of the connective tissue* cause 8 admissions giving a ratio of 9·6 per 1,000. They included inflammation of connective tissue (3), and abscess of connective tissue (5). *Skin diseases* caused 16 admissions giving a ratio of 21·5 per 1,000. The chief diseases were ulcer (5), boils (4), onychia (3).

Among *general injuries* there were 3 cases of heat-stroke and 1 of lightning-stroke. *Local injuries* contributed 73 cases, 1 death and 4 invalids giving respective ratios of 87·2, 1·20, and 4·78 per 1,000. They included burns and scalds (1), sprain (10), dislocation (8), fractures (14), concussion of brain (13). The death was due to a wound of the abdomen (sword) and occurred at Wynberg. Four cases were invalided for concussion of brain. Under the head of *poisons* a single case of belladonna poisoning was admitted.

WOMEN.—The average strength was 245, the number admitted 215, and the deaths 5, giving admission and mortality ratios of 877·6 and 20·41 per 1,000.

There were 12 cases of *influenza*, giving a ratio of 49·0. *Enteric fever* caused 4 admissions and 1 death, with respective ratios of 16·3 and 4·08 per 1,000. The death occurred at Woodstock, Cape Colony. *Dysentery* was the cause of 6 admissions with a ratio of 24·5 per 1,000.

Single cases were admitted for intermittent fever, puerperal septicæmia, secondary syphilis, tubercle of lung, ringworm, and non-malignant new growth, giving a ratio of 4·1 per 1,000 each. One death occurred from tubercle of lung. *Rheumatism* caused 4 admissions, with a ratio of 16·3; *anæmia* caused 6 admissions, with a ratio of 24·5; and *debility* 40 admissions, with a ratio of 163·3.

Diseases of the Nervous System caused 7 admissions, with an equivalent ratio of 28·6. The diseases were vertigo 2, neuralgia 2, hysteria 1, and nervous weakness 2. There were 3 admissions for *diseases of the eye*, giving a ratio of 12·2. They comprised conjunctivitis 2, and œdema 1. *Diseases of the circulatory system* caused 4 admissions and 1 death (due to excessive growth of fat) giving ratios of 16·3 and 4·08 per 1,000. *Diseases of the respiratory system* contributed 13 cases with an admission ratio of 53·1 per 1,000. The cases were pneumonia 1, bronchitis 11, and phthisis 1. There were 77 admissions for *diseases of the digestive system*, giving a ratio of 314·3 per 1,000. One death occurred from ulceration of throat at Maritzburg. The admissions were chiefly caused by :—inflammation of stomach 21, indigestion 28, diarrhœa 13, and peritonitis 3. A single admission was due to *inflammation of lymphatic glands*. Four cases were admitted for *diseases of the urinary system*, giving a ratio of 16·3. The diseases comprised acute nephritis 1, movable kidney 1, inflammation of bladder 2. There were 18 admissions for *diseases of the generative system* giving a ratio of 73·5. The principal causes of admission were hæmorrhage 2, abortion 10, and abscess of female breast 2. *Diseases of the connective tissue* caused 2 admissions for abscess, giving an admission ratio of 8·2 per 1,000. There were 6 admissions for *diseases of the skin*, with an equivalent ratio of 24·5 per 1,000. The admissions comprised impetigo 1, pemphigus 1, acne 1, ulcer 2, and boil 1.

Local injuries gave 2 admissions for wounds with an equivalent ratio of 8·2 per 1,000. One case of gunshot wound died out of hospital at Bloemfontein. The fatality was due to an accident.

CHILDREN.—The average strength was 333, the number of admissions 230 and the deaths 11. The admission ratio was 690·7 per 1,000 and the death rate 33·03 per 1,000. *Eruptive fevers* caused 27 admissions, giving a ratio of 81·1. They included chicken pox 15, measles 11, and scarlet fever 1. Single cases were admitted for *influenza* and *diphtheria*. The latter occurred at Bloemfontein, and terminated fatally. *Simple continued fever* caused 3 admissions, with a rate of 9·0 per 1,000. *Enteric fever* caused 5 admissions with no deaths, giving a ratio of 15·0 per 1,000. *Dysentery* gave 6 admissions and 3 deaths, with respective ratios of 18·0 and 9·01 per 1,000. The deaths occurred at Wynberg (1) and Pretoria (2). There were 2 admissions for *ague*, 1 for *tubercle of lung* (fatal), and 2 for *parasitic diseases*. *Other general diseases* caused 34 admissions with 2 deaths, giving ratios of 107·4 and 5·51 respectively. The diseases comprised whooping cough 1, mumps 4, immaturity at birth 1, and debility 26. A death from immaturity at birth occurred at Maritzburg and there was also a death from debility at Wynberg. *Diseases of the nervous system* caused 4 admissions and 1 death with ratios of 12·0 and 3·00 per 1,000. The diseases were infantile eclampsia 1, and laryngismus stridulus 3. There were 10 admissions for *diseases of the eye*, giving a ratio of 30·0. The diseases comprised conjunctivitis 7, ulcer of cornea 1, hypermetropia 1, and blepharitis marginalis 1. *Other organs of special sense* caused 3 admissions, giving a ratio of 8·3. The diseases were inflammation of external meatus 1, and inflammation of membrana tympani 2. There were 39 admissions for *diseases of the respiratory system* giving a ratio of 107·4 per 1,000. The admissions included bronchitis 36, pneumonia 2, and phthisis 1. *Diseases of the digestive system* caused 78 admissions with

uth Africa. 4 deaths giving respective ratios of 228·7 and 11·02 per 1,000. The deaths were due to enteritis 2, diarrhœa 1, and jaundice 1. The admissions chiefly comprised tonsilitis 13, inflammation of stomach 13, enteritis 10, diarrhœa 31, and jaundice 3. *Diseases of the lymphatic system* caused 2 admissions for inflammation of lymphatic glands, and *diseases of the urinary system* 1, for inflammation of vagina. *Inflammation of the connective tissue* caused 1 admission. *Skin diseases* gave 6 admissions, with a ratio of 16·5 per 1,000. They included erythema 1, impetigo 3, ulcer 1, and boil 1. There were 4 admissions for *local injuries* giving a ratio of 13·8 per 1,000. The diseases were burns and scalds 1, fracture 1, and wound 2.

VACCINATION.—The majority of vaccinations during the year were carried out with lymph from the Government Bacteriological Institutes at Grahamstown and the Government Laboratory at Maritzburg. In a few instances lymph was obtained from the Army Vaccine Institute at Aldershot. Of 8 re-vaccinations among recruits 6 produced perfect results, 1 modified and 1 failure. Of 297 re-vaccinnations among men 97 gave perfect results, 120 modified and 80 failures. Of 5 primary vaccinations and 5 re-vaccinations among children 7 gave perfect results and 3 failed.

SANITARY CONDITIONS.

The Principal Medical Officer (Surgeon-General J. D. Edge, M.D., C.B., A.M.S.), in his general remarks on the sanitary conditions in the Command reports as follows :—

The garrisons of South Africa were generally maintained under better conditions of sanitation than in the previous year. The majority of the troops remained in standing camps under canvas, but as buildings were erected in the new South African cantonments units were transferred into them during the course of the year.

The Barberton hutments were the first occupied and were followed by Potchefstroom, Middelburg (Transvaal), Standerton, Pretoria, Bloemfontein and Harrismith. Although none of these cantonments were completed before occupation in the sanitary essentials of thorough drainage and water-carriage systems, still it was considered advisable to remove the men from under tents which they had occupied for so long a period. The principal danger from a sanitary standpoint, was the risk of soil contamination, as the result of defective sanitary care. Increased sanitary vigilance was consequently exercised in maintaining these new camp sites in as healthy a condition as possible, with fair results. The hutments at Standerton in particular were well cared for and at this station at least, the premature occupation of cantonments should produce no subsequent ill effects. At Potchefstroom and Bloemfontein a good deal of trouble was experienced in maintaining a sufficiently high standard of cleanliness in the lines, but generally speaking the units appreciated the change to more comfortable quarters and interested themselves in their sanitary surroundings.

During the year drinking water supplies have received particular attention. Both chemical and bacteriological examinations of water have been frequently carried out at the Army Medical Laboratory at Pretoria, and wherever suspected water-borne diseases showed an unusual incidence the drinking water supply was subjected to special examination. It was recognised that the water supplies of nearly all the South African towns are unsatisfactory. Very few, if any, are sufficiently protected at their origin and the exposed character of their catchment areas render them liable to contamination from various human and animal sources. As a

whole, sanitation in South Africa remains in a primitive condition and South African towns and their surroundings present many sanitary requirements. To avoid the effects of contamination provision was made for boiling and filtering all drinking water at each station and instructions were issued to that effect. The stringency with which these details were carried out depended altogether on the disciplinary standard of each unit. *South Africa.*

Various forms of apparatus were erected for boiling water, but Soyers stoves were more or less in general use. A steam sterilizer of a special pattern was in use at Mooi river and during the temporary occupation of Ladysmith. It is not reported on favourably and there appears to be some doubt as to whether the boiling point of water is reached by it. The Waterhouse Forbes apparatus at Bloemfontein is considered to have worked efficiently and well. During the Klip River—Kroonstad Manœuvres, a specially constructed filtering water cart was tried but it was found to be unsuitable for field service conditions

Water purification works by which water is boiled in tanks and subsequently distributed through pipes have been recommended for nearly all the new cantonments of South Africa, and it is hoped by this means to provide a thoroughly pure and sterile drinking water to the troops. Subsequent to boiling, drinking water was generally passed through Berkefeld filters before issue. The distribution of water in camps was generally carried out by water carts. These were filled either directly from wells (*e.g.*, Kroonstad, Middelburg (Cape Colony), &c.), and rivers (*e.g.*, Potchefstroom, Mooi River), or indirectly through a piped supply (*e.g.*, Middelburg (Transvaal), Barberton, Harrismith, Bloemfontein). At Kroonstad a dual supply, the one from wells for drinking purposes, the other from the Valsch river for washing, &c., was in use; a dual source of supply of this kind is never satisfactory, as for obvious reasons it is likely to be a source of danger. The use of water carts is unsatisfactory. They are troublesome to keep clean and the water is subjected to contamination in filling them. A complete piped distribution from municipal sources was obtained at Wynberg and in the barracks and hospital at Pretoria. The provision of well constructed corrugated iron tanks for storage of water in camps was considerably extended during the year.

The general interior economy of the standing camps was considerably improved during this period. Each camp was more liberally equipped with better constructed accessories, such as kitchens, wash-houses, latrines, &c., and altogether units were established on a more comfortable footing. A larger amount of accommodation was allowed each soldier under canvas and in many cases the ordinary bell tents were replaced by the Indian pattern E.P. tents. The difficulties experienced in maintaining camp sites up to a high standard of sanitation were chiefly connected with the removal of night soil and refuse material as also wash and slop water.

The pail or bucket system of night soil removal was universally adopted in camps, and urine tubs and tank carts were provided for the collection and removal of urine. This system cannot be considered satisfactory, but was the best practical arrangement under the circumstances. A septic tank installation is in working order at the Pretoria cantonments, and is giving satisfactory results.

Dry refuse material from camps was collected in rubbish bins, and subsequently removed by contractors in open carts. From a sanitary aspect this method was not satisfactory, as a considerable amount of spillage took place around the bins and from the carts.

The disposal of slop and washwater caused much trouble. In the absence of solidly constructed surface and underground drains, wash and slop water was carried off by open earthen channels. These were apt to become clogged with soil, as the effect of rain storms, and sufficient attention was not always paid to keep them clear. On the other hand, in dry weather the water frequently stagnated in these channels, and gave rise to unpleasant odours.

Bathing and washing arrangements in camps left much to be desired. Seldom were baths available, and in a few instances only could a river be utilised for bathing purposes. At Pietersburg and Harrismith sail baths

uth Africa. were constructed, but, as a rule, all personal washing was carried out by the use of zinc basins.

Generally speaking, the food of the soldier was of excellent quality, and comprised the standard ration as issued in England, with an additional allowance of meat. Occasional issues of tinned meat and biscuits were made in lieu of frozen meat and bread. The scarcity and expense of fresh vegetables present a troublesome factor in the food supplies of the soldier in South Africa, but I trust that this difficulty will be in the future overcome by the establishment of cantonment gardens under our own control. At many stations an issue of lime juice was authorised, owing to the insufficiency of the fresh vegetable ration. The transport of bread and meat in open carts was condemned, and the issue of specially constructed bread and meat vans has been recommended.

The khaki serge clothing in general use proved well adapted to the climate. At some of the stations (*e.g.*, Barberton and Maritzburg) a khaki drill uniform would be more suitable during some of the warm months, but taken as a whole, the present clothing is satisfactory for South Africa.

I.—Cape Colony.

At *Middelburg*, early in the year, temporary huts were erected for the troops who had previously been living under canvas. These huts are built of corrugated iron, size 20 by 20 by 8½ feet; they are unlined and without flooring, but are much more comfortable than tents, as they afford some protection from the dust storms, which are so frequent and disagreeable at this station. It was recommended that wooden floors and linings should be provided, but this was not carried out, as orders were received limiting the expenditure on temporary camps.

A good supply of water has been obtained by boring from 50 to 70 feet. The bore holes, five in number, go through 14 feet of compact rock, beneath which water is found. The water is pumped up by engines, and distributed by pipes to iron reservoirs in each camp. It is hoped the water will soon be laid on to every part of each camp. In some cases water carts have still to be used to convey water from the camp tanks to cookhouses, &c. For this reason, and because of the position of some of the camps, it was thought possible some contamination might take place. The water is still boiled. Prior to these bores being made water was obtained from springs, which possibly were liable to contamination.

Enteric fever was prevalent for five months prior to the new supply being taken into use, but whether its cessation was due to the purer water or termination of season of prevalence is uncertain.

A new cantonment is to be built at Middelburg, and sites for the permanent huts are being prepared on fresh ground. It is hoped that by metalling the roads and irrigating when possible, dust may be lessened. New borings for water will be made, which it is thought will give an ample supply to the new cantonments.

The sanitary conditions of the neighbouring town of Middelburg is not good; and it is probable that many of the men contracted enteric fever there.

At *Naauwpoort* the troops are in temporary huts like those in Middelburg The water supply to the camp is good, and the Medical Officer reports that no case of enteric fever or dysentery was contracted in the station during the year. This place will soon be evacuated.

Stellenbosch Camp was occupied until 1st September. Enteric fever and dysentery were prevalent owing, probably, to soil pollution from long occupation, and use of impure and forbidden water. Owing to this prevalence the camp was abandoned.

At *Simonstown* the Palace Barracks was used as a hospital for the troops stationed there, and as a convalescent hospital for patients from Wynberg until the end of the year, when it was given up and re-occupied by troops. A detention ward was established, and all sick requiring hospital treatment are sent to Wynberg.

At *Wynberg* the hospital is being remodelled as far as possible. It is intended to lay down, as soon as possible, a system of water carriage for sewage, in the whole of Wynberg camp. At present the dry earth system is used. The prison is too small for present requirements and its improvement is under consideration.

At *Cape Town* the troops and staff offices are located in the Castle, which is really an old fort, and, like all such old buildings, difficult to adapt to modern ideas. The w.c. accommodation is indifferent, this is being considered, and the drainage requires frequent attention to prevent blocking of the pipes. During the year water closets have been provided for the children's school. The sergeants' mess has been remodelled, and wire gauze provided for all kitchen windows. A few men of the Royal Garrison Artillery are quartered in outlying forts, these latter call for no remarks. The old main barracks in the town have been sold and are being demolished.

II.—NATAL.

Newcastle.—With the exception of a few details left to hand over stores, equipment, &c., Newcastle was finally closed as a military station on the 31st March, 1903, there is therefore little or nothing to add to the sanitary report already furnished for 1902. The Medical Officer in Charge reports that the camps were kept clean and in good sanitary condition. Drinking water, which was obtained from the Town water supply and springs in the vicinity of the camps, was sterilised by steam, Berkefeld filters also being used. Prevailing diseases amongst civil population were enteric fever and dysentery, attributable to the general lack of sanitation in the town.

Vryheid also being closed as a military station on the 25th February, 1903, the above remarks on Newcastle are equally applicable. The report furnished at that period by the Civil Surgeon in charge is a very meagre one. Previous to the 1st December, 1902, the hospital had been a non-dieted one. The Medical Officer in charge reports that the water supply, which was derived from a stream, was liable to pollution, but he omitted to state what steps were taken to purify it. The troops were under canvas, and the general state of health was good. Several cases of enteric occurred amongst the civil population owing to a polluted water supply. The pail system was in use.

Umbilo.—The hospital at this station, which was a small iron building containing beds, was closed on the 7th February, 1903. The station was used solely as a Boer encampment for prisoners of war. The Civil Surgeon in charge reports the sanitary arrangements as satisfactory. The water supply was from Durban and was boiled and filtered, and the pail system for latrines worked well.

Durban.—This station, used as a port for disembarkation and as a base for medical stores during the war, was finally closed as a medical store depôt in July, 1903. Any sick among the staff employed were transferred to Addington Hospital for treatment. The various small details employed were accounted for on the Maritzburg returns, and were accommodated in iron and wood huts. One case of plague, terminating fatally, occurred on the 3rd July, 1903. The patient was a private of Royal Army Medical Corps employed at the base depôt of medical stores and living in one of these huts. The disease was supposed to have been contracted by means of tow, infested with rats, with which the deceased was working. Plague prevailed in Durban in the early part of the year.

South Africa.

Mooi River.—This camp was open from the 1st January, 1903, and closed on the 11th June, 1903, the troops returning to Ladysmith for the cold weather. It was again re-opened on the 1st October, 1903, and is still occupied.

The site of the camp, which is a good one, was somewhat cramped during the early part of the year, for the reasons assigned in the medical officer's report, but later on it was extended to fresh ground, with excellent results. The site being somewhat elevated with a good slope, the drainage of both camps was effectual. The water supply to the camp is pumped up from a protected length of Mooi river, the suspended matter is first precipitated with alum, the water is then sterlised by steam, passes into cisterns to cool and then is distributed in special pipes to the camp. A separate system of tanks stores the washing water. The supply of both is good and abundant. All the troops were under canvas; marquees, accommodating 9 to 10 Lawson's Tait beds, and the single fly circular tents 3. There was no overcrowding, but I am of opinion, however, that single fly-tents for men are both uncomfortable and unsuitable in the hot and wet seasons in this country. The pail system is in use, and worked satisfactory, but instead of dry earth a solution of chloride of lime (4 ozs. of chloride of lime to the gallon of water), is used for both urinal and latrine buckets, and answered satisfactorily. These buckets are emptied twice a day into sanitary carts, the night soil and urine being emptied into pits or trenches about a mile from camp, and covered in efficiently. Dry refuse was collected in a sanitary van and removed to a camp destructor, which was kept working day and night. A sanitary gang of 15 native sweepers was specially authorised for the purpose of keeping the ground thoroughly swept, and to remove all rubbish, dust, &c., which would otherwise accumulate. Chloride of lime was freely used for dust-bins, ash-pits, and horse lines. Bathing in the Mooi river was prohibited owing to its pollution from the village, but the baths and lavatories were ample and efficient.

The hospital consists of 100 beds, under E.P. tents, with the necessary annexes built of corrugated iron. It is well situated on an elevated plateau, about ¾ of a mile from camp, and the drainage is excellent. For the first two months of the year the bungalow, formerly used as an officers' hospital, was occupied as a detention hospital, pending the opening of the regular dieted hospital, in March.

Mooi River is a particularly healthy station, and owing to its high altitude, 4,500 feet above sea level, it is, comparatively speaking, cool and bracing all the year round, none of the damp relaxing heat which prevails at Maritzburg in the hot season being experienced. No special sanitary recommendations of importance were necessary. All suggestions as to minor improvements were at once carried out. The sanitary condition of village of Mooi River and its vicinity is very far from satisfactory, and constant representations to the local authorities have had to be made, with but indifferent success.

Maritzburg.—There is very little to add to the report furnished last year, as to the general sanitary condition of this camp. As pointed out before, the structural defects of many of the barrack buildings are very considerable, and a number of them have been condemned as unsuitable for occupation. Many of the surface drains are defective, consequently allowing of considerable pollution of the soil. Minor sanitary improvements have at once been attended to, but any extensive alteration suggested have been held in abeyance pending the decision as to the final location of troops in Natal.

The water supply to the camp although sufficient, has been anything but satisfactory as to quality. Unfortunately during the last few months of the year Maiche's apparatus, which has been used for sterilising the water in barracks, was found defective, and all drinking water is now boiled. The pail system, as at Mooi River, is in use and is well looked after, a solution of chloride of lime and water being substituted for dry earth.

Enteric fever, which, as in nearly all towns in South Africa, is almost coincident with the onset of the hot weather and rains, has been very prevalent in Maritzburg, especially among the civil population where it assumed the form of an epidemic. The same causes as in former years contributed to

its spread, viz., a more or less polluted water supply, infected dust, flies, &c., and possibly milk. The carriage and distribution of milk in the city of Maritzburg is far from satisfactory; this is generally supplied in bottles carried about by Kaffirs and the cleansing of which is left to them. The bottles are closed with old dirty corks or foul bits of paper, and it is no unusual thing to see Kaffirs washing out these bottles with soil and gravel taken from the road and rinsed out with highly polluted water. *South Africa.*

A new system of drainage has been started for Maritzburg as well as a new water supply, which it is hoped will have the effect of rendering the town more sanitary than it has been for a number of years, as well as curtailing these periodical outbreaks of enteric.

Ladysmith.—This station which has got a notoriously bad name for enteric, was only occupied by troops for some three months in the cold weather—from the 12th June, 1903 to the 30th September, 1903—when the garrison, composed of the 7th Dragoon Guards and 7th and 13th Brigades Royal Field Artillery was moved to Mooi River. The general sanitation of the town is far from satisfactory, fortunately, Tin Town, where the troops were located, is some 2 miles or so outside the town. The buildings which were single storied barrack rooms of wood and galvanized iron, capable of containing some 25 men, on an average contained 18 men only, giving to each about 700 cubic feet of air space.

The water supply was from the Klip river, and was first collected in filtration settling tanks, and afterwards being pumped into tanks for steam sterilisation, and distributed by pipes throughout the barracks. The pail system for latrines and urinals was in use and worked satisfactorily, chloride of lime being freely used, both in solution and as a powder, for disinfecting purposes. The cooking ranges used were not satisfactory. The cells were frequently overcrowded, owing to the scarcity of accommodation at the Military Prison at Maritzburg.

Vegetables, fruit, &c., curious to say, as in most of the towns in Natal, were scarce and very dear.

The surface drainage was anything but satisfactory, and greatly calculated to give rise to soil pollutions, owing to the absence of proper concrete drains. The site of the barracks is anything but a desirable one, lying as it does between two kopjes on a very slightly sloping plateau. It is not, however, to be occupied again. As in most towns in South Africa, enteric fever is the prevailing disease in the hot season among the civil population. Fortunately the troops this year only being stationed there for some three months in the cool weather, the admissions were only 10. The same causes, as stated elsewhere, no doubt contributed to its spread, viz., a highly polluted soil and dust, very imperfect sanitation, and contaminated water and milk, flies, &c.

Howick.—This station was occupied by troops—the 2nd West Yorkshire Regiment from 1st January, 1903 to the 3rd April, 1903, and again by the 7th Brigade, Royal Field Artillery, from the 1st October, 1903, to the present date. The barracks, which are situated on the top of a ridge about two miles south of the village of Howick, are single storied-huts of wood and iron, well ventilated, lighted by electricity, and capable of accommodating some 20 men each, giving an average cubic space per man of 800 cubic feet. The buildings are, in fact, the old hospital wards of No. 15 General Hospital.

Situated as Howick is, some 3,439 feet above the sea level, it is an ideal healthy station for troops all the year round, consequently the sick rate is very low and the health of the troops excellent. The water supply is from the Umgeni river, the intake being at a distance of about a mile from the camp. The water is pumped up and received into four large tanks, each capable of containing 800 gallons, subsequently being passed through Berkefeld filters. The water is of very fair quality. The pail system is also in use at this station, and works satisfactory. The guard room cells were found inefficient, and a marquee is now used instead. The surface drains, which lead into the main drains, which run into the river a considerable distance below the intake, require looking after, as they are inclined to get blocked up with dust and vegetation. Chloride of lime is freely used,

South Africa Only one case of enteric was reported during the period under occupation, and it was probably contracted in the village of Howick. The hospital, which is one of the above-mentioned buildings, is a non-dieted one of 20 beds, all serious cases being transferred by rail to Maritzburg, one hour's journey.

III.—Transvaal and Orange River Colony.

Bloemfontein District.—The following stations were garrisoned during the year:—Bloemfontein, Kroonstad and Ladybrand.

Bloemfontein.—The general health of the troops was good. The following diseases were prevalent:—Scarlet fever, enteric, dysentery, rheumatism, tonsillitis, and diarrhœa. The occurrence of scarlet fever was due to the arrival of drafts ex transport "Dilwara," by which the infection was spread among the garrison. The origin of enteric fever was not traceable but the Senior Medical Officer at Bloemfontein thought that the infection was probably water borne. As causes predisposing to dysentery are mentioned, chills caused by neglect of suitable clothing, the diurnal variations of temperature, excessive meat diet, and lack of vegetables. Rheumatic affections are reported as due to exposure under canvas. Tonsillitis was very prevalent and it was associated with the existence of scarlet fever in epidemic form. All suspects were isolated and treated as cases of mild scarlatina. The cases of diarrhœa were mainly due to the result of errors in diet, exposure, cold, &c.

During the early part of the year troops were accommodated under canvas, latterly the whole garrison excepting the Royal Artillery batteries was placed in hutments in the new cantonments. The water supply of the garrison was obtained from municipal sources and is derived from the Modder river at Sanna's Post. It was distributed throughout camps in pipes. All drinking water was boiled and filtered before use. A pail and dry earth system of night soil removal was carried out both in camps and cantonments. Rations are reported as generally satisfactory. The scarcity and expense of procuring vegetables by private purchase is commented on. The clothing of the men is reported as suitable and adapted to the climate.

Kroonstad.—The general health of troops was good. Latterly the station passed through a severe epidemic of enteric fever. Other prevalent diseases were as follows:—Influenza, simple continued fever, dysentery, venereal diseases, sore throat and tonsillitis, and diarrhœal complaints. There was an entire absence of malarial and eruptive fevers. Three cases recorded for malaria were contracted elsewhere. Influenza caused a large number of admissions, but under this heading various slight febrile cases are recorded. Enteric cases accounted for 79 admissions. Thirty-two were admitted during the months of January–June, which may be looked upon as the end of the 1902–3 enteric season, and the remainder from June to December, the beginning of the 1903–4 season. The origin of the disease is attributed to the insanitary state of the camping grounds, and to water contamination. The prevalence of dysentery was probably due to similar causes, as were also sore throats, tonsilitis, and diarrhœal complaints. Primary venereal diseases are reported to have been contracted from Dutch and Kaffir women residing in the neighbourhood.

Kroonstad is occupied as a temporary garrison. The troops were maintained throughout the year under canvas. The drinking water supply was obtained from bore-holes, that for washing from the river Valsch. The water from these bore-holes is reported as of good quality, but that of the municipal supply, obtained from the river Valsch, is highly contaminated. As in the other garrisons of South Africa, all drinking water was ordered to be boiled and filtered before issue, but neglect of these instructions had

to be brought to notice during the enteric season. The condition of the various camp sites was far from satisfactory. The soil had been polluted by former occupation, and a good deal of the sickness at the station must be attributed to its former insanitary state. Excreta removal was carried out on the pail and dry earth system. The surface and waste water system of drainage was reported as unsatisfactory, but was subsequently improved. Rations were satisfactory, and the clothing of the troops proved suitable to the climate.

Ladybrand.—General health of the troops was very good.

The prevalent diseases comprised influenza, primary venereal complaints, tonsillitis, sore throat, and diarrhœa. Only one admission was recorded for enteric fever. Its origin is unknown. Influenza in mild epidemic form appeared during the months of October and November and gave rise to several admissions for this disease.

The garrison consisted of a single regiment of Mounted Infantry, with necessary details of the departmental corps. The camp was under canvas, and is situated on a clean and healthy site. The usual standing camp system of conservancy was in force, and is reported to have been carried out efficiently. Rations were reported of good quality, although the difficulty of obtaining fresh vegetables for the men during the winter months is remarked on. The clothing proved suitable and well adapted to the climate.

Potchefstroom District.—The troops at Potchefstroom formed the only garrison in the district. General health throughout the year has been fair. A considerable improvement is shown in the health of the garrison during the last quarter.

Prevalent diseases comprised the following:—Influenza, simple continued fever, enteric, dysentery, malarial fevers, venereal, pneumonia, tonsillitis, diarrhœa, and jaundice. Eruptive fevers show only one admission, that for scarlatina. The Medical Officer in charge of the hospital reports that "no doubt some of these (simple continued fever cases) were mild cases of enteric fever, which perhaps had not presented sufficiently definite symptoms to be diagnosed as such. All recovered." Enteric fever was reported as probably due to the occupation of same camp sites for many months by the King's Dragoon Guards, which unit furnished the largest number of admissions. The immunity from enteric fever enjoyed by this station during the beginning of the enteric season 1903-04 (November to January), as compared with last year, was very marked, and may to a considerable degree be attributed to improved sanitary conditions. Dysentery was regarded as predisposed by chills caused by the extreme alterations of temperature combined with rain. Most of the primary venereal cases were contracted in the Kaffir locations in the vicinity of the station. Pneumonia appeared in severe epidemic form, and gave rise to a virulent type of disease, causing 7 deaths. The prevalence of jaundice was very marked at this station. Its incidence, like that of tonsillitis, was more severe during the earlier months of the year, when the sanitary condition of the station was far from satisfactory.

The troops were in hutments for the greater part of the year. These hutments were occupied before the completion of adequate sanitary arrangements, and considerable difficulty was consequently experienced in keeping the lines in a satisfactory state of sanitation. The high rate of sickness in one regiment was attributed to their want of interest in and attention to sanitary measures.

The water supply was derived from the Mooi river, an unsatisfactory source. Steps were, however, taken to ensure the boiling and filtering of all drinking water. A pail and dry earth system of night soil removal was in vogue. Bathing accommodation in barracks was not completed, but opportunity was given to the men for bathing in the Mooi river. Rations were reported as satisfactory. The clothing of the men proved sufficient and suitable to the climate and the season.

Harrismith District.—Harrismith was the only garrison in this district. The general health of the troops has been good.

South Africa. The prevalent diseases of the garrison were as follows:—Influenza, enteric and simple continued fevers, venereal diseases, rheumatism, debility, tonsillitis, and diarrhœa. All but 6 of the cases of enteric fever occurred during the first five months of the year. One case was admitted to hospital in October and 5 in December. Fourteen admissions were recorded during January, and a similar number in February. During both these months flies abounded, and it is considered that they acted as potent factors in the spread of the disease. The rains during these months are also stated to have probably exercised some influence in its causation. During the period of dust storms—July, August, and September—the garrison was altogether exempt from enteric fever. There was a marked immunity from malarial fevers at this station. The prevalence of rheumatism is attributed to the great ranges of the daily temperature at Harrismith. Tonsillitis caused a large proportion of the admissions, and is attributed to the men living in tents throughout the year.

The troops at Harrismith remained under canvas throughout the year. The general sanitary condition of the several camps is reported as satisfactory. The drinking water was obtained from the municipal supply and is reported as of fair quality. Its source is from springs. The conservancy arrangements were provided as for standing camps and removal of excreta was carried out on the pail and dry earth system. The clothing of the troops proved suitable to the climate, and the food of the soldier is satisfactorily reported on. Permanent hutments are in course of preparation for the new cantonments at this station.

Standerton District.—Standerton formed the only garrison in this district. The general health of troops was good, a considerable improvement taking place during the latter months as compared with the early part of the year.

Eruptive fevers were represented by a few cases of scarlet fever, which were introduced into the station by a draft of the Devon Regiment lately arrived from England ex transport "Dilwara." A mild epidemic of influenza passed through the garrison and gave cause for a good many admissions. Enteric fever was prevalent during the early months of the year. Its causation is attributed to occupation of old and polluted camp sites. The change to fresh camping grounds, combined with increased sanitary vigilance in connection with the boiling and filtering of drinking water, caused a diminution in the number of cases. Three only were admitted during the enteric season (October to December, 1903) one of whom probably contracted the disease in Johannesburg prison whence he had been lately discharged. The other two cases were contracted in the town. Dysentery like enteric fever occurred chiefly in the early part of the year. The majority were recurrent attacks of formerly contracted disease. Some were probably due to defective sanitation. The cases of malaria were contracted elsewhere, there being no malaria at Standerton. Venereal disease was more prevalent than usual, and is attributed to the presence of diseased Kaffir women in the native location near the town. Six cases of bilharzia hæmatobia were admitted to hospital. They are reported to have been imported, as the disease is unknown at this station. Rheumatism caused a comparatively large admission rate. The disease is attributed to exposure under canvas. A slight epidemic (10 cases) of pneumonia occurred during the winter months. Cold and variations in temperature are reported as causes for the prevalence of tonsilitis. Diarrhœal complaints, due to chills and indiscretions in diet, were frequent among young soldiers in the early months of the year. A case of death from bite of a tarantula spider occurred at this station.

The general sanitary condition of the camps was good. The troops were accommodated in tents during the first half of the year, but were subsequently transferred to hutments in the new cantonments. The water supply for the garrison was obtained from the river Vaal. It is muddy and liable to contamination. Unless carefully treated this water is unsuitable for drinking purposes. Specially constructed sterilisation and filter huts were erected throughout barracks and camps, and it is chiefly due to the thorough measures adopted for boiling and filtering drinking water that *the freedom* of the garrison from enteric and allied diseases during the

latter part of the year must be attributed. A dry earth system of night soil removal was in vogue, throughout camp and barracks. The transfer of troops from tents to hutments appears to have had a beneficial effect on their health. The quality of rations is reported on favourably. The clothing of the troops proved suitable for the climate. Bathing and ablution arrangements were generally satisfactory. The new cantonments at Standerton are in course of construction, and will shortly be completed for permanent occupation.

Middelburg District.—Middelburg and Barberton formed the permanent garrisons of the district, whereas Machadodorp and Lydenburg were temporarily occupied. The former (Machadodorp) was vacated in March, and the latter (Lydenburg) in January of this year. The general health of the troops was exceptionally good.

A few cases of rubella were admitted to hospital. These appeared at Barberton, and were introduced into the station by drafts ex transport "Sardinia." Enteric fever, simple continued fever, dysentery, diarrhœal complaints, throat complaints, and malaria represent the prevalent diseases of the district.

At Middelburg, enteric fever, simple continued fever, dysentery, and malarial attacks predominated. Enteric and simple continued fever occurred almost entirely during the early months of the year, when conditions of sanitation had not reached their present standard. Malaria was not of local origin, but mainly affected men from India and others who had previously served in the Komati valley.

At Machadodorp the relative proportion of enteric and simple continued fever admissions was large. The medical officer in charge of the hospital remarks that some of the cases diagnosed as simple continued fever were probably exceptionally mild attacks of enteric. The prevalance of enteric was attributed to probable water contamination. The disease chiefly affected young soldiers under 21 years of age and with less than a year's service in South Africa. A small epidemic of diarrhœa amongst the prisoners in the local prison is stated to be due to the habit acquired by them of drinking quantities of soapy water to evade punishment. On detection the disease stopped. Other dysenteric and diarrhœal attacks are attributed to chills caused by sudden and extensive variations in the daily temperature. Over-crowding in tents (8 men to each bell tent) is blamed for some of the cases of tonsillitis and sore throat.

At Barberton, enteric fever, dysentery, malaria, diarrhœa, and inflammation of the connective tissue, were the principal causes of admission. Enteric fever only latterly appeared at this station, and a small outbreak was apparently traced to the insanitary conditions which existed around two of the occupied hutments.

The larger portion of the troops in this district were located in hutments. At Machadodorp and Lydenburg tents alone were used. At Barberton the entire garrison was provided with huts, while at Middelburg tents were occupied for the first half of the year and hutments during the latter months.

With the exception of Machadodorp, where the water supply was subject to contamination, the drinking water was of good quality. At Middelburg and Lydenburg it was derived from well-protected springs, and at Barberton the local municipal supply was in use.

Camp sites were generally satisfactory and the construction and occupation of the new South African cantonment buildings were further advanced at Middelburg and Barberton than at any other station. This, and the purity of the water supply no doubt accounts for the comparative healthy record of the district.

The camp system of conservancy was in general use. At Barberton, and latterly at Middelburg, a drainage system for wash and slop water was provided.

The quality of rations and the suitability of the men's clothing are reported on as satisfactory.

Hutments for the garrison of Middelburg and Barberton are in course of construction and at present near completion.

South Africa. *Pretoria District.*—The following stations were garrisoned in this district, Pretoria, Krugersdorp, and Pietersburg. The last-named was vacated by troops and the hospital closed on the 17th June of this year. Krugersdorp is still maintained as a temporary garrison. The general health of the troops was good.

Eruptive fevers show only a few admissions and comprise a few cases of scarlet fever at Pretoria and a case each, at Pretoria and Pietersburg, of measles. Influenza prevailed somewhat at Krugersdorp, from which station are also reported a few cases of simple continued fever. Enteric fever, dysentery, diarrhœal complaints and throat affections represented the prevalent diseases of the district. Pneumonia appeared both at Pretoria and Krugersdorp during the winter months but was of less severity than in the previous year. The district was nearly altogether free from malaria, and comparatively free from circulatory troubles and venereal diseases.

The troops of the Pretoria garrison were accommodated chiefly in tents, a few only being located in hutments and barracks. At Pietersburg and Krugersdorp the men were entirely under canvas.

Frequent chemical and bacteriological examinations extending over a prolonged period show that the water supplies of all these stations must be considered as unsatisfactory. At Pietersburg the water supply was obtained from the river Sterkloop and although a fresh supply was latterly obtained from borings the character of this water was open to suspicion. At Krugersdorp the water supply came from springs and wells. Periodic reports of suspected contamination received during the year show it to be not altogether reliable. At Pretoria where the municipal supply was almost exclusively used, systematic examination has latterly proved it to be subject to serious contamination, chiefly noticeable during enteric prevalence. Under these circumstances it was considered necessary to boil and filter all drinking water before issue.

The positions of camp sites were not altogether satisfactory. Owing to scarcity of suitable ground in the neighbourhood of convenient centres many old camps continued to be occupied. At Pretoria the 8th Hussar camp, near Daspoort, has been continuously occupied for two years or more, and was only partially vacated late this year on the departure of the regiment for England. The neighbourhood of the Staats Artillerie Barracks at the same station, where the Army Ordnance Depôt had been established since the occupation of Pretoria in 1900, and at present exists, has been rendered insanitary. The Leinster camp in the vicinity of Quagga Poort was situated near a sewage farm and had to be moved. The Welsh camp, the healthiest situation of all, has been occupied for two years and more. If one recognises the varying conditions of sanitation under which all the above sites were occupied for prolonged periods, it is not difficult to realise the polluted state of the surface soil which must have existed throughout the past year. At Pietersburg and Krugersdorp a better condition of camp sites existed, although there also camps were pitched if not actually on, certainly in the vicinity of, formerly polluted ground. Several changes of camp sites were resorted to but with doubtful results. The camp system of conservancy was generally adopted throughout the district and the removal of excreta by the pail and dry earth method was universally carried out.

The khaki serge clothing issued to the troops is reported on favourably.

Food supplies were generally excellent and the occasional issue of tinned meat and biscuits does not seem to have exercised any prejudicial effects on the health of the troops. A temporary scarcity of vegetables and fresh fruit was reported at Krugersdorp, and a daily allowance of lime juice issued in lieu of the same. Considerable difficulty was experienced in providing suitable ablution and bath accommodation at the various camps. Spruits and pools were used as bathing places at Krugersdorp, a sail bath served this purpose at Pietersburg, whereas at Pretoria, temporary, though hardly satisfactory arrangements were being made for baths and wash-houses. Cantonments with hutments are in course of preparation for the Pretoria garrison.

XLII.—ON THE HEALTH OF THE TROOPS SERVING IN THE ISLAND OF MAURITIUS.

SICKNESS AND MORTALITY.

I.—EUROPEAN TROOPS.

Mauritius.

The average strength of warrant officers, non-commissioned officers and men serving in the Command during the year was 746. The garrison throughout the year consisted of Nos. 68 and 101 Companies, Royal Garrison Artillery, No. 43 and Mauritius (Submarine Mining) Companies Royal Engineers, and detachments Army Service, Royal Army Medical and Army Ordnance Corps, and Garrison Staff.

The 1st Battalion Northumberland Fusiliers arrived in the Command in April, from South Africa.

The admission, mortality and invaliding rates, &c., among the troops forming the garrison are shown in the following table :—

1903. Average Strength.	Admissions.	Deaths.			Invalids.		Average constantly Sick.	Ratio per 1,000 of Strength.				
		In the Command.	Of Invalids.	Total.	Sent Home.	Finally Discharged.		Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
746	643	2	2	4	16	6	53·51	861·9	5·36	21·45	8·04	71·73

The admission rate is lower than in 1902 by 399·3, the death rate by 8·76 and the constantly sick rate by 5·19 per 1,000. In comparison with similar average ratios for the preceding ten years, the admission rate has decreased by 359·9, the death rate by 5·78, and the constantly sick rate by 2·02 per 1,000.

The average sick time to each soldier was 6·18 days, which is shorter than in 1902 by 1·89 days, and than the average for the ten years, 1893–1902, by ·74 of a day. The average duration of each case of sickness was 30·38 days, which is longer than in the previous year by 8·12 days, and than the average period by 8·35 days.

In Abstract XXXIV is a table showing the health statistics for the several corps which served in the Command during the year.

In the Royal Artillery, the admission and constantly sick rates were 855·7 and 66·21 per 1,000, as compared with 1,423·6 and 91·18 respectively in the previous year. In the Royal Engineers these rates were 982·5 and 65·53, and in the Infantry they stood at 893·1 and 86·38 per 1,000 respectively.

Mauritius. The sickness and mortality among the troops, arranged according to the ages of the men, are shown in the following table:—

Ages.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 20 years ..	40	20	—	—	500·0	—	—
From 20 to 25 years	385	429	1	11	1,114·3	2·60	28·57
„ 25 „ 30 „	235	139	—	2	591·5	—	8·51
„ 30 „ 35 „	55	34	—	—	618·2	—	—
„ 35 „ 40 „	19	18	1	1	947·4	52·63	52·63
Over 40 years ..	12	3	—	2	250·0	—	166·67
Total ..	746	643	2	16	861·9	2·68	21·45

With regard to the influence of service in the Command on sickness and mortality amongst the troops, the following table has been compiled:—

Length of Service in Command.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 1 year ..	439	377	1	7	858·8	2·28	15·94
From 1 to 2 years ..	290	247	1	9	851·7	3·45	31·03
„ 2 „ 3 „ ..	12	10	—	—	833·3	—	—
„ 3 „ 4 „ ..	4	7	—	—	1,750·0	—	—
„ 4 „ 5 „ ..	1	2	—	—	2,000·0	—	—
„ 5 „ 10 „ ..	—	—	—	—	—	—	—
Over 10 years ..	—	—	—	—	—	—	—
Total ..	746	643	2	16	861·9	2·68	21·45

In Abstract XIX is a table showing the principal statistics of sickness and mortality, arranged according to the various sections of disease.

General Diseases.—There was not a single admission for *eruptive fevers* in the year under review, as compared with 49 (mostly rubella) in the previous year, nor of *influenza*, which furnished 4 admissions in 1902. There was 1 admission shown under *plague* in a man of the Northumberland Fusiliers, who was employed on police duty in Port Louis, where plague was very prevalent at the time. He was treated in the civil plague hospital and recovered.

Enteric Fever was the cause of 4 admissions, equal to a ratio of 5·4 per 1,000, as compared with 25·9, the previous year's rate, and 14·2, that of the average. There was no death from this cause. In three of the cases the cause was uncertain, but in the other case it was attributed to infection while on nursing duty, the patient being an orderly of the Royal Army Medical Corps.

Other continued Fevers. — Only 2 admissions are recorded under this heading, both cases of simple continued fever.

Dysentery.—Two admissions are recorded as against 5 in the previous year. One case, very severe, was contracted at Port Louis and terminated fatally. The ratio, 2·7 per 1,000, is lower by 9·1 and 8·1 respectively than the previous year's rate and that of the decennial average.

Malarial Fevers, with 112 admissions, gave a ratio of 150·1 per 1,000 which shows a marked decrease as compared with the previous year's and decennial average rates, the figures for which were 219·3 and 326·1 respectively. Of the admissions, 100 were for ague and 12 for remittent fever. *Mauritius.*

The following table shows the monthly prevalence of malarial fevers:—

January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
8	18	19	12	8	14	9	4	9	5	2	4

No admissions were recorded under *septic* or *tubercular diseases.*

Venereal Diseases.—For *primary syphilis* there were 50 admissions giving a ratio of 67·0 per 1,000, which is below the previous year's rate by 20·1, but above that of the average by 15·8. If to this be added the sickness from soft chancre, for which there were 73 admissions, with 7·91 men constantly sick, the total admission ratio for primary venereal sores equalled 164·9 per 1,000, which is higher than the previous year's rate by 75·5, and than the average for the preceding ten years by 86·4. *Secondary syphilis* furnished 44 admissions, or a ratio of 59·0 per 1,000, which is higher than in the previous year by 49·6 and than the average rate by 27·7. *Gonorrhœa*, with 89 admissions, gave a ratio of 119·3, or an increase, as compared with the rate for 1902 and that of the decennial average, of 34·6 and 9·4 respectively. Taking all these forms of venereal disease together, the total admission rate amounts to 343·2, which is 159·7 above the rate for the previous year, and 123·5 in excess of the decennial average. The amount of constant inefficiency on account of these diseases was equal to 36·81 per 1,000, or an increase of 22·08 and 17·09 as compared with the previous year's and decennial average rates.*

Parasitic Diseases were represented by 19 admissions for scabies, equal to a ratio of 25·5 per 1,000, which is 23·1 above the previous year's rate and 5·8 over the average.

For *alcoholism* there were 2 admissions, or a ratio of 2·7 per 1,000, as compared with with 14·1 in the previous year, and 3·9 the average rate.

Rheumatism, with 10 admissions, gave a ratio of 13·4 per 1,000, which is above the rate for 1902 by 1·6, but below the decennial average to a similar extent. Gout was the cause of 1 of the admissions.

Debility caused 18 admissions, equal to a ratio of 24·1 per 1,000, being lower by 25·3 than the previous year's rate, but above that of the average by 7·6. For *other general diseases* there was 1 admission, a case of tetanus, which terminated fatally.

Local Diseases.—*Diseases of the Nervous System* were the cause of 6 admissions, of which 3 were for neuralgia, 1 paralysis, 1 epilepsy, and 1 melancholia. The ratio, 8·0 per 1,000, is 13·2 below the rate given in 1902, and also below the average by 2·3.

Diseases of the Eye contributed 10 admissions as compared with 1 in the previous year. The cases were, 4 of conjunctivitis, 3 iritis, and 1 each of keratitis, ametropia, and obstruction of nasal duct. The ratio, 13·4 per 1,000, shows an increase, as compared with the previous year and the average of the preceding ten years of 11·0 and 6·3 respectively.

For *diseases of other organs of special sense* there were 12 admissions, the equivalent ratio being 16·1 per 1,000, which compared with the previous year's rate and that of the decennial average shows a decline of 2·7 in the

* There were no admissions for ulcer of penis of non-venereal origin.

Mauritius.

former and 1·7 in the latter. All of the admissions were due to aural disease.

Diseases of the Circulatory System were represented by 3 admissions, 1 for valvular disease of heart, disordered action of heart and phlebitis respectively. The ratio of admission, 4·0 per 1,000, shows a decrease of 5·4 and 2·8 respectively, in comparison with the previous year's rate and that of the decennial average. There was a death from aneurysm of the aorta in an invalid who had left the Command.

Diseases of the Respiratory System gave 7 admissions, all for bronchial affections. The admission ratio, 9·4 per 1,000, is 25·9 below the previous year's rate and 16·4 less than the average.

Diseases of the Digestive System caused 47 admissions, equal to a ratio of 63·0 per 1,000, which compared with the previous year's rate and that of the decennial average, shows a decrease of 35·8 and 31·7 respectively. Of the cases, 20 were due to affections of the mouth and throat, 10 to dyspepsia, 9 to diarrhœa, 3 to hepatitis, 2 to typhlitis, 2 to jaundice, and 1 to colic.

Diseases of the Lymphatic System.—There were 7 admissions for inflammation of lymphatic glands, giving a ratio of 9·4 per 1,000, which is just half the ratio given in 1902, and 15·3 below the average rate.

Diseases of the Urinary System, with 4 admissions, comprising 3 for cystitis, and 1 for Bright's disease, gave a ratio of 5·4 per 1,000, showing a slight increase (·7) on the previous year's rate, and one of 2·0 on that of the average. There was 1 death from Bright's disease in an invalid who had left the Command.

Diseases of the generative system furnished 82 admissions, of which 73 were for soft chancre and have been previously referred to under venereal diseases; in addition there were 7 cases of orchitis and 2 of stricture of the urethra. The ratio per 1,000 for these diseases equalled 109·9, which, compared with the previous year's rate and that of the decennial average, shows an increase of 98·1 on the former and 70·2 on the latter.

Diseases of the Organs of Locomotion.—There were 14 admissions, 13 for synovitis and 1 for myalgia, equal to a ratio of 18·8 per 1,000, showing an increase of 9·4 and 11·2 respectively, as compared with the previous year's rate and the average rate for the preceding ten years.

Diseases of the Connective Tissue gave 22 admissions, or a ratio of 29·5 per 1,000, which shows an increase on the previous year's and the decennial average rates of 3·6 and 6·6 respectively. Eighteen of the admissions were for abscess and 4 for inflammation.

Diseases of the Skin furnished 10 admissions, equal to a ratio of 13·4 per 1,000, which is lower than the previous year's rate by 19·5, and that of the decennial average by 23·2. The cases comprised 5 of ulcer, 4 of eczema, and 1 of boil.

INJURIES.—There were 64 admissions recorded under this head, giving a ratio of 85·8 per 1,000, which is lower than the previous year's rate and that of the decennial average by 69·5 and 39·7 respectively. All the admissions are returned as *local injuries*, the majority of the cases being wounds, sprains, contusions, and fractures.

SURGICAL OPERATIONS.—No major operations are recorded.

INVALIDING.—The number of men invalided home during the year was 16, giving a ratio of 21·45 per 1,000, and exhibiting a decrease as compared with the previous year's and decennial average rates of 6·79 and 20·52 respectively. Of the men invalided 11, or 36·91 per 1,000, belonged to the Artillery; 2, or 17·54, to the Engineers; 2, or 6·90, to the Infantry; and 1, or 22·72, to Garrison Staff and Departments. With regard to age, 11 men, or 28·57 per 1,000, were between 20 and 25 years; 2 men, or 8·51 per 1,000, were among men between 25 and 30 years; 1, or 52·63 per 1,000, was between 35 and 40 years; and 2 men, or 166·67 per 1,000, were over 40 years of age. The corresponding ratios in the previous year were 17·02, 46·30, and 33·33. As regards service in the Command, 7 men, or 15·95 per 1,000,

were in their first year of service, and 9, or 31·03 per 1,000, were in their second year in the Command.

The causes of invaliding were ague 7 cases, enteric fever 3, debility 2, and 1 case each of gonorrhœa, hernia, Bright's disease, and contusion of eyeball.

There were 6 men finally discharged during the year, as medically unfit for further service, all for debility.

OFFICERS.—In an average strength of 65, there were 34 cases of sickness, equal to a ratio of 523·1 per 1,000, which is lower than the previous year's rate by 51·4. There were 9 admissions for digestive disorders, 7 for local injuries, 6 for ague, 5 for diseases of the organs of locomotion, and 2 for skin diseases. There was no death, nor were any officers invalided during the year

WOMEN.—The average strength was 59, and there were 53 admissions, giving a ratio of 898·3 per 1,000, which is higher than the previous year's rate by 436·8. The chief causes of admission were debility with 25 cases, disorders of the digestive system 10, skin diseases 4, anæmia 4, and 3 each for respiratory diseases and diseases of the connective tissue. There was no death.

CHILDREN.—In an average strength of 87, there were 34 admissions, equal to a ratio of 390·8 per 1,000, or lower by 47·6 than the previous year's rate. Among the admissions were 6 cases of affections of the mouth and throat, 6 of diarrhœa, 6 of bronchitis, 4 of wounds, 2 of debility, and 2 of broncho-pneumonia. No death occurred.

VACCINATION.—There was 1 case of re-vaccination in a recruit with perfect result. Among the children there were 8 primary vaccinations and 1 re-vaccination, all with perfect results. The lymph was obtained from the Mauritius Civil Medical and Health Department.

II.—NON-EUROPEAN TROOPS.

The non-European troops present during the year were Nos. 2 and 4 Companies, Ceylon-Mauritius Battalion, Royal Garrison Artillery, the 18th Bengal Infantry, the 79th Carnatic Infantry, and the 11th Rajput Infantry. The 11th Rajput Infantry arrived from India, and the 18th Bengal Infantry embarked for India during the month of November.

The total average strength was 1,392, and there were 1,288 admissions to hospital, with 22 deaths, the equivalent ratios per 1,000 being 925·3 and 15·80 respectively; the former showing an increase of 166·1, and the latter one of 9·96 as compared with the corresponding ratios in the previous year.

The distribution of all diseases among the Royal Artillery and Infantry was 1,836·9 in the former, and 822·6 in the latter.

The prevailing diseases were malarial fevers, which accounted for 833 admissions, or a ratio of 598·4 per 1,000, as compared with 401·0 in 1902. All the cases except 2, which were shown as remittent fever, were of ague. The greatest prevalence for these diseases was in the first and second quarters of the year.

Plague, which was very prevalent among the civil population during the latter part of the year, caused 5 admissions in the 79th Carnatic Infantry, which occupied barracks in the neighbourhood of the most infected part of the city. The regiment was removed into the Line baracks, after which no other cases occurred. All the cases had a fatal termination.

Mauritius.

Among other causes of admission were :—skin diseases (chiefly ulcer and boils) 78, respiratory diseases 48, parasitic diseases 30, dysentery 29, digestive disorders 25, venereal diseases 21, rheumatism 20, and local injuries 83 cases.

The deaths were due to malarial fever 7, plague 5, tubercle of lung 3, pneumonia 3, valvular diseases of heart 2, and 1 each to enteric fever and tetanus.

Twenty invalids were sent to India for discharge, viz. :—1 for ague, 2 tubercle of lung, 2 leprosy, 1 rheumatism, 4 debility, 1 iritis, 1 valvular disease of heart, 2 disordered action of heart, 1 asthma, 1 broncho-pneumonia, 1 piles, 1 curvature of spine, 1 leucodermia, and 1 fracture. Forty-two men were sent to India on sick furlough, 32 being on account of malarial fevers, the remaining 10 were for various diseases.

VACCINATION.—Sixty-one men were re-vaccinated during the year. The whole were failures. The lymph was obtained from the Mauritius Medical and Health Department.

SANITARY CONDITIONS.

The Senior Medical Officer (Colonel E. North, R.A.M.C.) reports that the sanitary conditions were satisfactory during the year. Plague was again very prevalent in the Colony during the latter months of the year, and strict precautions were taken to safeguard the troops, with satisfactory results, only 1 case occurring among the European troops ; the man in this instance being employed on police duty at Port Louis. It was considered advisable to move the troops from Port Louis, at an earlier date than usual, to Curepipe and Phœnix Camp. Malarial fevers were also very prevalent during the early months of the year. Arrangements have been made for all men doing duty in Port Louis to be provided with mosquito curtains, which, it is hoped, will have a beneficial effect.

The following improvements have been carried out during the year :—

Curepipe.—The entire surface drainage has been completed. The foul drainage of the camp is also being reconstructed, and the addition of a septic tank is shortly to be made. At the Station Hospital a new administrative block has been completed and taken into use. A new block, to contain 48 beds and an operating theatre, is in course of construction.

At *Fort George* a new plunge bath has been constructed, and all old and disused buildings have been demolished. The Colonial Government has recently approved of sufficient expenditure to improve the "Mer Rouge," a lake in the vicinity of Fort George, the insanitary condition of which has been commented on in previous years.

At *Vacoas* the new barracks, married quarters, detention hospital, and military prison for British troops have been completed, and are now in occupation. Some further improvements in the surface drainage of this camp have been recommended, and, it is hoped, will shortly be carried out.

In the *Line Barracks* a new detention hospital and accommodation for the reserve medical stores are in course of construction. Only a few European troops, employed on police duties, are now located in these barracks. The old military prison has been condemned and closed.

XIII.—ON THE HEALTH OF THE TROOPS SERVING IN THE ISLAND OF CEYLON.

Sickness and Mortality.

I.—European Troops.

Ceylon.

The average strength of warrant officers, non-commissioned officers and men was 1,347. The force serving throughout the year comprised Nos. 87 and 88 Companies, Royal Garrison Artillery, half the 41st (Fortress) Company, Royal Engineers, the 1st Battalion Royal West Kent Regiment, and detachments of the Royal Engineers, Army Service, Royal Army Medical, Army Ordnance and Army Pay Corps, and Garrison Staff.

The 1st Battalion Gloucestershire Regiment left the Command for India in January.

The sanatorium at Newera Eliya was occupied from February to June inclusive, and from September till the end of the year.

The following table shows the admission, mortality and invaliding rates, &c., among the troops in the Command :—

1903. Average Strength.	Admissions.	Deaths.			Invalids.		Average Constantly Sick.	Ratio per 1,000 of Strength.				
		In the Command.	Of Invalids.	Total.	Sent Home.	Finally Discharged.		Admissions.	Deaths.	Invalids. Sent Home.	Invalids finally Discharged.	Constantly Sick.
1,347	995	14	1	15	18	10	51·43	738·7	11·14	13·36	7·42	38·18

The admission rate is higher than in 1902 by 152·2, but lower than the average rate for the preceding ten years by 161·4 per 1,000 ; the death rate is lower in the former comparison by ·26, but higher in the latter by 1·47 ; and the constantly sick rate is higher than in the previous year by 3·10, but lower than the decennial average rate by 12·20. The average sick time to each soldier was 13·94 days, which is longer than in 1902 by 1·14 days, but shorter than the decennial average by 4·45 days. The average duration of each case of sickness, 18·87 days, is shorter than in the previous year by 2·96 days and than the average by 1·56 days.

In Abstract XXXIV is a table showing the statistics for the various corps which served in Ceylon during the year, from which it will be seen that the admission rate for the Royal Artillery was 585·2 per 1,000, for the Royal Engineers 574·5, for the Infantry 834·8, and for other corps 307·7 per 1,000. Of the 14 deaths which occurred in the Command, 9 were in the Royal Artillery, 2 in the Royal Engineers, and 3 in the Infantry ; the respective ratios being 26·94, 21·28 and 3·37 *per 1,000*. The ratio of constant inefficiency was

ylon. 31·38 in the Artillery, 21·38 in the Engineers, 44·07 in the Infantry, and 8·46 in other corps.

The sickness and mortality among the troops, arranged according to the ages of the men, are shown in the following table :—

Ages.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths	Invaliding.
Under 20 years ..	28	9	—	—	321·4	—	—
From 20 to 25 years ..	711	683	5	12	960·6	7·03	16·88
„ 25 to 30 „ ..	425	229	6	2	538·8	14·12	4·71
„ 30 to 35 „ ..	125	46	2	1	368·0	16·00	8·00
„ 35 to 40 „ ..	46	24	1	2	521·7	21·74	43·48
Over 40 years.. ..	12	4	—	1	333·3	—	83·33
Total	1,347	995	14	18	738·7	10·39	13·36

With regard to the influence of service in the Command on sickness and mortality amongst the troops, the following table has been compiled :—

Length of Service in the Command.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 1 year	1,034	852	9	9	821·0	8·70	8·70
From 1 to 2 years ..	260	130	5	9	500·0	19·23	34·62
„ 2 to 3 „ ..	43	8	—	—	186·0	—	—
„ 3 to 4 „ ..	7	5	—	—	714·3	—	—
„ 4 to 5 „ ..	2	—	—	—	—	—	—
„ 5 to 10 „ ..	1	—	—	—	—	—	—
Over 10 years.. ..	—	—	—	—	—	—	—
Total	1,347	995	14	18	738·7	10·39	13·36

In Abstract XX is given a table showing the principal statistics of sickness, mortality, &c., according to the various sections of disease.

General Diseases.—There was no admission under the heading of *eruptive fevers* during the year. *Influenza* caused 3 admissions, equal to a ratio of 2·2 per 1,000, as compared with 15·4 in the previous year and 4·1, the decennial average rate. There was only 1 admission for *enteric fever*, equal to a ratio of ·7 per 1,000, showing decrease with the previous year's rate and that of the decennial average to the extent of 7·2 and 5·0 respectively. It is considered that the disease was contracted either at Malta or on board ship, as the man was admitted a few days after his arrival on the Island. *Other continued fevers* furnished 31 admissions, or a ratio of 23·0 per 1,000, which is higher by 6·1 than the previous year's rate, but below the decennial rate by 6·0. *Dysentery*, with 11 admissions, gave a ratio of 8·2 per 1,000, or 2·8 above the rate for 1902, but 7·3 below the average. There was 1 death due to this disease.

Malarial Fevers accounted for 70 of the admissions, giving a ratio of 52·0 per 1,000, and showing an increase of 5·4 on the previous year's rate, but a decrease of 72·7 as compared with that of the decennial average. Of the admissions 43 occurred at Trincomali and 21 at Colombo, which calls for no special comment, beyond the fact that the former is a far more malarious

station than the latter, being surrounded by jungle in which many men go out shooting.

Tubercular Diseases.—Under this head there were 5 admissions for tubercle of lung, equal to a ratio of 3·7 per 1,000, which exceeds the ratios of the previous year and decennial average to the extent of 2·7 and 1·8 respectively.

Venereal Diseases.—*Primary syphilis* caused 22 admissions, giving a ratio of 16·3 per 1,000, which shows an increase of 2·4, with the previous year's rate, but a decrease of 47·1 in comparison with the average. If to this be added the sickness from soft chancre, for which there were 79 admissions, with 5·98 men constantly sick, the total admission ratio for primary venereal sores equalled 75·0 per 1,000, which shows an increase of 33·8 on the previous year's rate, but a decrease of 12·0 as compared with the decennial average rate. *Secondary syphilis*, with 19 admissions, gave a ratio of 14·1 per 1,000, which is above the previous year's rate by 5·7, but below that of the decennial average by 24·0. *Gonorrhœa* caused 197 admissions, giving a ratio of 146·3 per 1,000, which is higher by 69·0 and 37·2 respectively than the ratios for the previous year and average for the preceding ten years. Taking all forms of venereal disease together, the total admission ratio was 235·3 per 1,000, which is higher than the rate given in the preceding year by 108·4 and than that of the decennial average by 1·1. The average number of men constantly sick from these diseases was 22·07 giving a ratio of 16·38 per 1,000, as compared with 11·48 in 1902, and 18·59 the average rate.*

The following table shows the distribution of venereal disease in the several stations in the Command :—

Stations.	Strength.	Admitted for					Ratio per 1,000.
		Primary Syphilis.	Soft Chancre.	Secondary Syphilis.	Gonorrhœa.	Total.	
Colombo	587	14	54	6	85	159	270·9
Kandy	96	5	5	5	29	44	458·3
Trincomali	421	—	3	2	44	49	116·4
Diyatalawa	230	3	17	6	39	65	282·6
Newera Eliya ..	13	—	—	—	—	—	—
Total for Command	1,347	22	79	19	197	317	235·3

Parasitic Diseases caused 39 admissions, equal to a ratio of 29·0 per 1,000, showing increase on the previous year's and decennial rates of 12·6 and 12·7 respectively. The admissions were made up as follows :—ringworm 36, scabies 2, and phthiriasis 1.

Alcoholism caused 3 admissions, or a ratio of 2·2 per 1,000, as compared with 3·5 in 1902, and 5·5 the decennial average rate.

Rheumatism accounted for 16 admissions, or a ratio of 11·9 per 1,000, which is lower than the previous year's rate and that of the decennial average by ·5 and 5·5 respectively.

Debility, with 36 admissions, furnished a ratio of 26·7 per 1,000, and is above the previous year's and the decennial rates by 15·3 and 1·2 respectively.

* There were no admissions for ulcer of penis of non-venereal origin.

eylon. *Other General Diseases* accounted for 13 admissions, or a ratio of 9·7 per 1,000, which, compared with the previous year's and decennial average rates, shows an increase of 8·2 and 2·9 respectively. The admissions were 9 for non-malignant new growth, 3 for cyst, and 1 for anæmia.

LOCAL DISEASES.—*Diseases of the Nervous System*, caused 16 admissions, equal to a ratio of 11·8 per 1,000, showing an increase as compared with the previous year's rate and that of the decennial average to the extent of 3·9 and 4·7 respectively. The cases comprised 3 each of degeneration of spinal cord, epilepsy, and vertigo ; 2 each of headache and neuralgia ; and 1 each of hysteria, nervous weakness, and melancholia.

Diseases of the Eye, with 15 admissions, furnished a ratio of 11·1 per 1,000, which shows an increase of 4·7 on the previous year's rate, but is practically equal with the average. Conjunctivitis caused 8 of the admissions ; amblyopia, ametropia, and blepharitis 2 each ; and ulcer of cornea caused 1 admission.

Diseases of other organs of special sense gave 33 admissions, or a ratio of 24·5 per 1,000, which shows an increase of 16·1 on the rate for 1902, and one of 11·1 on the average rate. Of the cases, 26 were for inflammation of external meatus, 5 for suppuration of middle ear, and 2 for inflammation of membrana tympani.

Diseases of the Circulatory System caused 17 admissions, equal to a ratio of 12·6 per 1,000, which is 7·2 above the previous year's rate, and 3·8 higher than the decennial average. The admissions comprised 10 for disordered action of the heart, 3 for valvular disease of heart, 2 for varix, and 1 each for fatty degeneration of heart and aneurysm. There were 4 deaths, 2 being due to fatty degeneration of heart, and 1 each to valvular disease of heart and aortic aneurysm.

Respiratory Diseases.—There were 15 admissions recorded under this head, giving a ratio of 11·1 per 1,000, which, compared with the rate for the previous year and that of the decennial average, shows a decrease in the former of 5·8, and in the latter of 7·8. Thirteen of the admissions were for bronchial affections. One death was recorded from phthisis.

Diseases of the Digestive System, with 95 admissions, gave a ratio of 70·5 per 1,000, showing a decrease in comparison with the previous year's rate and that of the decennial average of 17·7 and 16·0 respectively. The chief causes of admission were mouth and throat affections 35, diarrhœa 23, hepatic affections 13, and dyspepsia 6 cases. There were 3 deaths, all due to abscess of liver.

Diseases of the Lymphatic System.—There were 26 admissions, giving a ratio of 19·3 per 1,000, showing a decrease as compared with the previous year's rate and that of the decennial average, to the extent of 9·0 in the former and 26·7 in the latter. Twenty-two of the cases were due to inflammation of glands, 3 to suppuration of glands, and 1 to splenitis.

Diseases of the Urinary System caused 5 admissions, the ratio per 1,000 being 3·7, which is an increase of 2·2 on the previous year's rate, and of 2·1 on the rate for the decennial period.

Diseases of the Generative System.—Under this head 111 admissions are shown, equal to a ratio of 82·4 per 1,000, which is above the rate for 1902 and the decennial rate to the extent of 28·9 in the former, and 35·5 in the latter comparison. In addition to the 79 cases of soft chancre, previously referred to under venereal diseases, there were 17 of orchitis, 6 phimosis, 5 balanitis, 2 paraphimosis, and 1 case each of hæmatocele and hydrocele.

Diseases of the Organs of Locomotion caused 20 admissions, or a ratio of 14·8 per 1,000, which is higher by 3·9 and 5·4 respectively than the ratios for the previous year and preceding ten years. Synovitis and myalgia were the chief causes of admission.

Diseases of the Connective Tissue, with 39 admissions, 28 for abscess and 11 for inflammation, gave a ratio of 29·0 per 1,000, which is above the previous year's rate by ·7, but below that of the average by 5·4.

Diseases of the Skin were the cause of 47 admissions, giving a ratio of 34·9 per 1,000, or a decrease of 2·8 as compared with the previous year's rate, and of 38·0 in comparison with the decennial rate. Boils, ulcers and eczema were, as usual, the chief causes of admission.

INJURIES.—Under this head were shown 80 admissions and 6 deaths. The admissions ratio equalled 59·4 per 1,000, which is 7·8 above the rate given in 1902, but below the decennial average rate by 21·3. There were 6 cases of heat-stroke, 5 of sun-stroke, and 1 of multiple injury recorded under *general injuries;* while under *local injuries* the admissions were principally due to wounds (21), sprains (18), contusions (16), and fractures (6). There were 2 deaths from multiple injury, the result of the premature discharge of a gun while firing a salute, and 1 each from heat-stroke, sun-stroke, gunshot wound (self-inflicted), and fracture of skull.

SURGICAL OPERATIONS comprised the following:—Removal of cyst (1), on liver abscess (3), removal of foreign body (1), for varicose veins (1), on lymphatic glands (9), amputations (3), radical cure of hernia (1), and circumcision (7). Death resulted in 3 cases, 2 after operation for abscess of liver, and 1 followed amputation of arm. Chloroform was the anæsthetic used in all cases.

INVALIDING.—There were 18 men invalided to England during the year, equal to a ratio of 13·36 per 1,000, which is ·97 above the previous year's rate, but 5·98 below the average.

Of the men invalided, 4, or 12·86 per 1,000, belonged to the Artillery; 1, or 10·64 per 1,000, to the Engineers; 11, or 12·36 per 1,000, to the Infantry; and 2, or 38·46 per 1,000, to garrison staff and departments.

With regard to age, 12 men, or 16·88 per 1,000, were between 20 and 25 years; 2 men, or 4·71 per 1,000, were between 25 and 30 years; 1 man, or 8·00 per 1,000, was between 30 and 35 years; and 3 men, or 51·72 per 1,000, were over 35 years of age. In the previous year the corresponding rates were 14·99, 10·64, 10·15 and 26·32.

As to service in the Command, 9 men, or 8·70 per 1,000, were in their first year; and 9 men, or 34·62 per 1,000, were in their second year. The corresponding ratios in the previous year were 9·64 and 10·94, but in that year there were in addition 25·32 for men between two and three years, and 32·79 for men with over three years in the Command; which groups are not represented in the year under review.

The causes of invaliding were tubercle of lung 3, secondary syphilis, ametropia, and abscess of liver, 2 each, and 1 each of Mediterranean fever, debility, degeneration of spinal cord, ulcer of cornea, valvular disease of heart, aneurysm, hammer toes, lupus and wound respectively.

There were 10 men discharged as medically unfit for further service, the ratio being 7·42 per 1,000, showing a decrease of 1·50 as compared with the rate in 1902, but exhibiting no change with the decennial average rate.

The causes of discharge were tubercle of lung, secondary syphilis, ametropia, rhinitis, valvular disease of heart, caries of dentine and cementum, flat foot, lupus, wound, and wound gunshot, 1 case each.

OFFICERS.—In an average strength of 60, there were 39 cases of sickness, equal to a ratio of 650·0 per 1,000, which is lower than the previous year's rate by 56·7. The cases included 6 of simple continued fever, 1 of enteric fever, 6 of malarial fevers, 8 of digestive disorders, and 6 of injuries. There were 2 deaths, 1 being due to enteric fever; the officer had recently returned from India where he had been on leave, and, as he was indisposed on reaching Colombo, there is little doubt that the disease was contracted in India. A death also occurred out of hospital, an officer was accidentally drowned while attempting to swim to his yacht.

WOMEN.—The average strength was 82, and there were 135 admissions, equal to a ratio of 1646·3 per 1,000, which is 596·3 above the preceding year's rate. The chief causes of admission were debility 52, digestive

eylon.

disorders 25, diseases of skin 13, rheumatism 6, diseases incidental to women 5, and dysentery 3. Two deaths occurred, 1 from dysentery and 1 from Bright's disease.

CHILDREN.—The average strength was 130, and there were 132 admissions, giving a ratio of 1,015·4 per 1,000, being an increase of 267·3 on the rate for 1902. Among the admissions were digestive disorders 25, conjunctivitis 18, bronchial affections 15, simple continued fever 14, skin diseases 14, debility 11, dysentery 9, and ague 7. There was 1 death from tubercle.

VACCINATION.—There was 1 case of re-vaccination among recruits with modified result, and among soldiers other than recruits was 1 of primary vaccination with perfect result. Among the children there were 7 cases of primary vaccination, of which 1 had a perfect result, the remainder being failures. The lymph used was obtained from the Ceylon Government.

II.—ASIATIC TROOPS.

The Asiatic troops were composed of the Ceylon and Mauritius Battalion (two companies), Royal Garrison Artillery, and the Ceylon (Submarine Mining) Company, Royal Engineers, the respective strengths being 171 and 48.

One company of the Artillery was stationed at Colombo, and the remainder of the Asiatic troops at Trincomali.

The total strength was 219, giving 286 admissions, equal to a ratio of 1,305·9 per 1,000, as compared with 942·4 in the previous year, and there were 9·00 men constantly sick, giving a ratio of 41·10 per 1,000, as compared with 28·38 in 1902. The average sick time to each soldier was 15·00 days, and the average duration of each case of sickness 11·49 days, as compared with 10·36 days and 10 99 days respectively in the preceding year. The chief causes of sickness were malarial fevers and ringworm, 50 cases each, debility 21, injuries 27, rheumatism 17, respiratory diseases 17, digestive disorders 12, diseases of connective tissue 12, diseases of the eye 11, dysentery 9, and gonorrhœa 8.

All the malarial fever and ringworm cases occurred at Trincomali; and 16 of the cases of debility also occurred at that station, against 5 at Colombo.

There were 2 deaths, 1 for thrombosis at Trincomali and 1 for multiple injury at Colombo, the latter being the case of a gunner, Royal Garrison Artillery, who was run over by a train and succumbed to his injuries after operation had been performed.

There were 9 men discharged the service on account of medical unfitness, 2 being for rheumatism, and 1 each for tubercle of lung, gonorrhœa, conjunctivitis, atrophy of optic nerve, bronchitis, asthma, and hernia.

There was only one case shown under surgical operations, a case of multiple injury previously noted under deaths; the case was hopeless from the first, and the man died three hours after operation.

The health of the non-European troops generally is described as very good.

SANITARY CONDITIONS.

The Senior Medical Officer (Lieut.-Colonel R. D. Hodson, R.A.M.C.) states that the health of the troops has been good, and the sanitary arrangements at all the stations have received careful attention. The sanitary points calling for remark under each station are as follows:—

Colombo.—The lighting of the station hospital referred to in previous reports is still unsatisfactory, as the oil lamps have not yet been replaced by either

the electric light or gas, but it is expected that this service will be taken in hand soon. An operating room has been provided in the hospital by the conversion of a small ward for this purpose. Amongst other improvements, a pack store has been built and appropriated as such, also an oil store ; and the floor of the hospital kitchen has been renewed in concrete. As regards the barracks, a concrete surface drain has been made round No. 1 block Echelon Barracks, a cookhouse for native grooms provided at Galle Back Stables, and additional latrine accommodation at the Flag Staff Guard Room. At the married quarters, Galle Face, additional kitchens have been erected, removing many disadvantages which previously existed, so that there is now ample accommodation for the families of the various corps occupying the quarters. Improvements have also been effected in the officers' bungalow known as "Steel Back Lodge," including the provision of a verandah on the north-east side of the house.

Trincomali.—An ice machine, the necessity for which was pointed out in the previous year's report, has recently been supplied, and it is hoped that a sufficient supply of ice will in future be available for the treatment of cases of fever with high temperature and heat-stroke. It is pointed out that it would be a boon to the troops if a government garden were made to supply green vegetables, as only a very small amount can be procured locally and scarcely any are imported.

The old latrines in the Lower Barracks, Fort Frederick, were condemned as insanitary, and a new latrine (consisting of four seats and two urinal compartments) has been provided. The position of the hospital at this station is described as very unsatisfactory both from a sanitary and military point of view ; and a new building is much needed.

Diyatalawa.—This camp is now definitely established as a permanent station, being used for musketry and field training, for which it is well adapted, and being healthy, it gives the men a relief from the moist relaxing heat of Colombo and Trincomali, enabling them to train under favourable conditions. The want of accommodation for married soldiers is much felt as the men have to leave their families down country, and much hardship is thereby inflicted.

Newera Eliya.—The temporary sanitorium was occupied for the greater part of the year and would have been all the year, but for a doubt about the Colonial Government allowing the military to have the loan of the building. The permanent sanitorium is now in course of construction and part of the buildings will be ready for use at an early date. The climate of Newera Eliya is said to be the best in the island and of immense benefit to convalescents from the low country.

XIV.—ON THE HEALTH OF THE TROOPS SERVING IN SOUTH CHINA.

Sickness and Mortality.

I.—European Troops.

South China. The average strength of the warrant officers, non-commissioned officers and men serving in South China was 1,220. The troops present throughout the year consisted of Nos. 78, 80 and 89 Companies, Royal Garrison Artillery, No. 25 (fortress) Hong Kong Submarine Mining Company, and details of the Royal Engineers, Headquarters of the 1st Battalion Nottinghamshire and Derbyshire Regiment, and detachments of Army Service Corps, Royal Army Medical Corps, Army Ordnance Corps, and Army Pay Corps.

There were no arrivals or departures among the troops during the year.

The following table shows the admission, mortality and invaliding rates among these troops:—

1903. Average Strength.	Admissions.	Deaths.			Invalids.		Average Constantly Sick.	Ratio per 1,000 of Strength.				
		In the Command.	Of Invalids.	Total.	Sent Home.	Finally Discharged.		Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
1,220	1,996	12	1	13	30	22	112·89	1,636·1	10·66	24·59	18·03	92·53

As compared with the previous year, the admission, mortality, and constantly sick rates show decreases of 531·9, 4·55, and 2·84 per 1,000, respectively, and in comparison with the decennial average rates they are also lower as regards admission and mortality ratio by 5·4, and 1·93, but fractionally above in the ratio of constantly sick. The average sick time to each soldier was 33·77 days, which is shorter than in the previous year, by 1·04 days, but longer than the average by ·02 of a day. The average duration of each case of sickness, 20·64 days, is longer than in the previous year by 4·58 days, and than the average by ·08 of a day.

In Abstract XXXIV is a table showing the health statistics for the several regiments and corps which served in the Command during the year, from which it will be seen that the admission rate for the Royal Artillery was 2,050·7, for the Royal Engineers 547·5, for the Infantry 1,782·6, and for other Corps 918·0 per 1,000. Of the 12 deaths in the Command, 9, or 16·33 per 1,000, occurred in the Royal Artillery, 1, or 5·59 per 1,000, in the Royal Engineers, and 2, or 5·34 per 1,000, in the Infantry. Among the depart-

mental corps there was no death. The ratio of constant inefficiency was 114·80 per 1,000 in the Royal Artillery, 39·33 in the Royal Engineers, 101·77 in the Infantry, and 42·21 among men of other Corps. *South China.*

The sickness and mortality among the troops, arranged according to the ages of the men, are shown in the following table :—

Age.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 20 years ..	32	62	—	2	1,937·5	—	62·50
From 20 to 25 years	621	1,123	5	14	1,808·4	8·05	22·54
„ 25 „ 30 „	380	640	4	11	1,684·2	10·53	28·95
„ 30 „ 35 „	114	111	3	2	973·7	26·32	17·54
„ 35 „ 40 „	57	55	—	—	964·9	—	—
Over 40 years ..	16	5	—	1	312·5	—	66·67
Total ..	1,220	1,996	12	30	1,636·1	9·84	24·59

With regard to the influence of service in the Command on sickness and mortality among the troops, the following table has been compiled :—

Length of Service in the Command.	Average Strength.	Admissions.	Deaths in the Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 1 year ..	686	1,186	8	23	1,728·9	11·66	33·53
From 1 to 2 years	382	553	4	5	1,447·6	10·47	13·09
„ 2 „ 3 „	112	210	—	1	1,875·0	—	8·93
„ 3 „ 4 „	33	45	—	—	1,363·6	—	—
„ 4 „ 5 „	3	2	—	1	666·7	—	333·33
„ 5 „ 10 „	3	—	—	—	—	—	—
Over 10 years ..	1	—	—	—	—	—	—
Total ..	1,220	1,996	12	30	1,636·1	9·84	24·59

The principal statistics of sickness, mortality, &c., arranged according to the various sections of disease, are given in Abstract XXI.

General Diseases.—*Eruptive Fevers* were represented by 1 admission for scarlet fever, or a ratio of ·8 per 1,000. For *influenza* there were 2 admissions, as compared with 1 admission in the previous year.

Enteric Fever, with 4 admissions, gave a ratio of 3·3 per 1,000, which exceeds the ratio given in 1902 by 1·1, and that of the decennial average to a similar extent. One case was a transfer from North China, and the disease may have been contracted in Pekin. Although a careful investigation was made in each case, in none of the instances could the source of infection be traced. Three of the cases terminated fatally.

Other Continued Fevers, as in the three previous years, gave no admission.

Dysentery was the cause of 10 admissions, equal to a ratio of 8·2 per 1,000, and shows an increase, as compared with the previous year's rate and that of the decennial period, to the extent of 1·0 and ·7 respectively. Two deaths are recorded under this head.

Malarial Fevers were represented by 937 admissions and 3 deaths. The admission ratio equalled 768·0 per 1,000, showing a decrease of 334·8 as compared with the previous year, but in comparison with the decennial

South China. average an increase of 205·5 is observed. Ague accounted for 915, and remittent fever for 22 of the admissions, and the deaths were from ague 2, and remittent fever 1, one of the former occurring in an invalid who had left the Command.

The following table shows the monthly prevalence of malarial fever :—

January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
167	80	69	58	72	88	82	64	68	50	80	59

Tubercular Diseases accounted for 3 admissions, or a ratio of 2·5 per 1,000, which is fractionally (·4) below the previous year's rate, and 1·0 less than the average. Two of the cases are returned as tubercle of lung, and one as tubercular disease of lymphatic glands.

Venereal Diseases.—There were 16 admissions for primary syphilis, equal to a ratio of 13·1 per 1,000, as compared with 10·1 in the previous year, and 52·2 the average rate. If to this be added the sickness for soft chancre, which caused 118 admissions with 11·25 men constantly sick, the total admission ratio for primary venereal sores equals 109·8, which is 49·7 above the previous year's rate, but below that of the decennial average by 64·5. *Secondary syphilis* gave 29 admissions, equal to a ratio of 23·8 per 1,000, which is fractionally (·6) above the rate for 1902, but below the decennial rate by 45·7. *Gonorrhœa* caused 271 admissions, equal to a ratio of 222·1 per 1,000, showing an increase as compared with the previous year's and the decennial average rates of 25·9 and 24·1 respectively.

Including all forms of venereal disease, the total admission rate equalled 355·7 per 1,000, which is above the previous year's rate by 76·2, but below the decennial average rate by 86·1.

The total amount of constant inefficiency from these diseases was 38·62, equal to a ratio of 32·85 per 1,000, which is 9·44 above the previous year's rate, but 5·77 below the average.*

Parasitic diseases caused 68 admissions, or a ratio of 55·7 per 1,000, which is 22·4 and 35·5 respectively in excess of the previous year's and decennial average rates. The admissions comprised 51 cases of ringworm, 7 each of bilharzia hæmatobia and scabies, 2 of ascaris lumbricoides, and 1 of phthirius inguinalis. The cases of bilharzia hæmatobia occurred in men who had recently come from South Africa, where they had contracted the disease.

Alcoholism was represented by 2 admissions, one being for delirium tremens. The ratio 1·6, is 4·9 below the previous year's rate, and 3·8 less than the average.

Rheumatism gave 8 admissions, equal to a ratio of 6·6 per 1,000, which is below the rate for 1902, and the average for the preceding ten years by 8·6 and 17·9 respectively. Two of the admissions are returned as rheumatic fever.

Debility caused 6 admissions, giving a ratio of 4·9 per 1,000, and showing a decline in comparison with the preceding year's rate and that of the decennial average, to the extent of 24·8 and 17·1 respectively.

Other general diseases furnished 8 admissions, 4 of which were for non-malignant new growth, 2 for cyst, and 2 for beri-beri.

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* There was 1 admission for ulcer of penis of non-venereal origin, with ·10 men constantly sick. If as in former years (prior to 1897), these cases were included with those of primary syphilis and soft chancre under the heading of primary venereal sores, the admission and constantly sick rates for all forms of venereal diseases would equal 356·6 and 32·93 per 1,000 respectively.

LOCAL DISEASES.—*Diseases of the Nervous System* were the cause of 31 admissions and 1 death. The admission ratio, 25·4 per 1,000, is higher than the previous year's rate by 2·2, and than the decennial average by 11·9. The cases comprised 15 of multiple neuritis, 4 each of headache and neuralgia, and 1 each of abscess of brain, epilepsy, vertigo, nervous weakness, idiocy, mania, melancholia, and dementia. The death occurred from abscess of brain.

Diseases of the Eye with 15 admissions caused a ratio of 12·3 per 1,000, which is slightly below (·7) the previous year's rate, but above the average to an almost similar extent (·6). Nine of the cases were for conjunctivitis, 4 for keratitis, and 1 each for ulceration of cornea, and acquired deformities (hydropthalmos anterior).

Diseases of other Organs of Special Sense caused 17 admissions, 15 for inflammation of external meatus, and 1 each for inflammation of middle ear and perforation of membrana tympani. The ratio 13·9 per 1,000, is lower than the rate in 1902 by 20·1, and than that of the decennial average by 15·5 per 1,000.

Diseases of the Circulatory System were the cause of 32 admissions and 1 death. The admission rate, 26·2 per 1,000, is higher than the previous year's and the decennial average rates by 7·4 and 11·7 respectively. The causes of admission were:—disordered action of heart 17 cases, varix 9, endocarditis 3, valvular disease of heart 2, and aneurysm 1. The death was due to valvular disease of heart.

Diseases of the Respiratory System gave 26 admissions, or a ratio of 21·3 per 1,000, which is lower than the rate for 1902 by 18·5, and than that of the decennial average by 8·5. Bronchial affections were the cause of 13 of the admissions, pleurisy 8, and there were 2 each for pneumonia and emphysema of lung, and 1 for laryngitis.

Diseases of the Digestive System were the origin of 144 admissions, or a ratio of 118·0 per 1,000, which is lower by 16·0 than the rate for 1902; but compared with the average an increase of 2·2 is observed. The chief causes of admission were:—affections of the mouth and throat 44, hepatic disorders 38, diarrhœa 24, indigestion 13, inflammation of intestines 9, and piles 7 cases. One death occurred from abscess of liver.

Diseases of the Lymphatic System, with 17 admissions, caused a ratio of 13·9 per 1,000, which shows an increase of 2·3 on the previous year's rate, but a decrease of 21·3, as compared with the decennial average. Ten of the admissions were due to inflammation and 7 to suppuration of the lymphatic glands.

Diseases of the Urinary System.—There were 4 admissions under this head, equal to a ratio of 3·3 per 1,000, which is above the previous year's rate by 1·9, and also fractionally above the average ratio (·2). Retention of urine 2 cases and acute nephritis and Bright's disease 1 case each were the causes of admission.

Diseases of the Generative System were the cause of 136 admissions, the equivalent ratio being 111·5 per 1,000, which shows an increase on the previous year's rate of 42·0, but a decrease as compared with that of the decennial average of 32·9. In addition to 118 cases of soft chancre, already referred to under venereal diseases, there were 10 admissions for orchitis, 3 for hydrocele, 2 for balanitis, and 1 each for hæmorrhage of urethra, phimosis, and ulcer of penis.

Diseases of the Organs of Locomotion caused 5 admissions, equal to a ratio of 4·1 per 1,000, which is lower by 4·6 and 8·5 respectively than the previous year's and decennial average rates. The cases were inflammation of joints 2, myalgia 2, and bursitis 1.

Diseases of the Connective Tissue accounted for 34 admissions, comprising 20 for abscess and 14 for inflammation, and giving a ratio of 27·9 per 1,000, which shows an increase of 7·6 on the previous year's rate, but a decrease of 1·4 as compared with average for the preceding ten years.

Diseases of the Skin numbered 58 admissions, giving a ratio of 47·5 per 1,000, which is lower than the previous year's rate and that of the decennial average by 30·0 and 24·8 respectively. The chief causes of admission were boils, pemphigus, sycosis, whitlow, and herpes.

South China. INJURIES were the cause of 112 admissions and 2 deaths. The admission ratio equalled 91·8, which is lower than the rate given in the previous year and that of the decennial average, by 38·5 and 19·1 respectively.

Under *general injuries* all the admissions (4) were for sun-stroke, and among the 108 admissions for *local injuries* were 39 cases of wound, 25 of sprain, 21 of contusion, and 5 of abrasion. One of the deaths occurred from suffocation by submersion, the opinion of a garrison court of enquiry being "that the man was accidentally drowned through falling overboard from the launch 'Alexandria.'" The other death was due to gunshot wound, "self-inflicted"; an inquest was held and a verdict of "suicide" was returned. No motive could be assigned for the act.

SURGICAL OPERATIONS.—These comprised excision of varices, removal of tubercular glands, two operations for abscess of liver, exploration for abscess of liver, and operation for phimosis. All were recorded as having satisfactory results. The anæsthetic used was chloroform and ether in 4 cases, and ether in 1 case.

INVALIDING.—There were 30 men invalided to England during the year, equal to a ratio of 24·59 per 1,000, which is lower than the rate for the preceding year and that of the decennial average by 58·68 and 30·03 respectively. Of the men invalided 12, or 21·78 per 1,000, belonged to the Royal Artillery, 1, or 5·59 per 1,000, to the Royal Engineers, 14, or 38·05 per 1,000, to the Infantry, and 3, or 24·59 per 1,000, to the Garrison Staff and Departments. As to the ages of the men sent home, 2, or 62·50 per 1,000, were under 20 years of age, 14, or 22·54 per 1,000, were between 20 and 25 years, 11, or 28·95 per 1,000, were between 25 and 30 years, 2, or 17·54 per 1,000, were between 30 and 35 years, and 1, or 66·67 per 1,000, was over 40 years of age. With regard to service in the Command, 23 men, or 33·53 per 1,000, were in their first year, 5 men, or 13·09 per 1,000, were in their second year, 1 man, or 8·93 per 1,000, was in his third year, and 1 man, or 333·33 per 1,000, was in his fifth year in the Command.

The causes of invaliding were bilharzia hæmatobia 7 cases, ague 6, tubercle of lung 3, beri-beri 3, multiple neuritis 2, and 1 case each rheumatic fever, debility, bulbar paralysis, epilepsy, idiocy, detachment of retina, inflammation of tympanum, endocarditis, and caries of dentine.

There were 22 men discharged as medically unfit for further service, equal to a ratio of 18·03 per 1,000, which is 3·69 below the previous year's rate, but 2·91 above the average. The causes of discharge were 7 bilharzia hæmatobia, 3 tubercle of lung, 2 melancholia, and 1 each ague, beri-beri, paralysis, epilepsy, neuritis, dementia, lenticular cataract, inflammation of middle ear, inflammation of membrana tympani, and caries of dentine and cementum.

OFFICERS.—In an average strength of 78, there were 73 cases of sickness, equal to a ratio of 935·9 per 1,000, which is lower than the previous year's rate by 78·0. The cases included 13 of ague, 14 of digestive disorders, 4 of influenza, 3 of synovitis, 2 each of plague, gout, debility, ulcer, boil, contusion, hydrocele, myalgia, and inflammation of lymphatic glands; there was also an admission each for dengue, enteric fever, and dysentery. The two cases of plague were treated in the Civil Infectious Hospital. The disease was very prevalent at the time among the civil population, and the quarters occupied by the officers were on the main road, where numerous Chinese congregate. Both belonged to the same regiment and were attacked within a few days of each other.

There was no death, but 7 officers were invalided, 1 each for plague, enteric fever, secondary syphilis, bilharzia hæmatobia, debility, delusional insanity, and inflammation of intestines.

WOMEN.—The average strength was 73, and there were 92 admissions, equal to a ratio of 1,277·8 per 1,000, which is below the previous year's rate by 1735·4. Malarial fevers were the cause of 46 of the admissions, debility 13, digestive disorders 6, respiratory diseases 4, diseases peculiar to women 4, nervous disorders 3, rheumatism 3, dengue 2, and scarlet fever 1. There was no death.

CHILDREN.—In an average strength of 114 there were 174 admissions and 1 death, equal to ratios of 1,526·3 and 8·77 per 1,000 respectively, both being below the corresponding rates in the previous year by 1797·5 and 48·37. Among the admissions were 82 cases of malarial fever, 23 of respiratory affections, 21 of digestive disorders, 18 of debility, 6 of scarlet fever, and 6 of skin affections. The death was due to remittent fever. *South China.*

VACCINATION.—Among soldiers, other than recruits there were 29 re-vaccinations, of which 9 had perfect and 11 modified results, and 9 were failures. Of 4 women re-vaccinated, 2 had perfect and 2 modified results; and of 22 primary re-vaccinations, among children, 16 had perfect results, and 6 were failures.

Lymph was obtained from the Government Institute. A supply of lymph was received from the Army Vaccine Institute, Aldershot, during the year, but, owing to the unfavourable climatic influences on the voyage, it was found inert; before being given up it was tried in a number of cases at Kowloon.

II.—ASIATIC TROOPS.

The force consisted of the Hong Kong-Singapore Royal Artillery, average strength 401, the Hong Kong Company Royal Engineers, average strength 69, the 110th Mahratta Light Infantry, 688, the 114th Mahrattas, 708, the 93rd Burma Infantry, 701, and men of other corps 1. The total average annual strength was 2,568, the admissions to hospital numbered 2,719, and the average constantly sick was 116·83. There were 20 deaths, and 12 men were discharged as invalids.

The admission rate equalled 1,058·8 per 1,000, that of mortality 7·79, and that of constantly sick 45·49 per 1,000. The admission rate is lower by 161·9, and that of constantly sick by 2·67, but the morality rate shows an increase of 1·95 as compared with the previous year's ratios.

Malarial fevers caused 1,223 admissions, of which 1,221 were for ague and 2 for remittent fever. There were 356 admissions for local injuries, 206 for respiratory diseases, 173 for skin diseases, 150 for digestive disorders, 115 for parasitic diseases, 102 for venereal diseases (including 25 of soft chancre), 80 for dysentery, 48 diseases of the eye, and 40 for other organs of special sense.

The causes of death were 4 from ague, 3 from tubercle of lung, 2 from pneumonia, and 1 each from dysentery, remittent fever, pyæmia, alcoholism, sarcoma, meningitis, broncho-pneumonia, sprue, hepatitis, gunshot wound (self-inflicted), and opium poisoning (self-administered). In neither of the latter cases could any motive be discovered for the act.

SANITARY CONDITIONS.

The Principal Medical Officer (Colonel W. E. Webb, M.D., R.A.M.C.) reports that the sanitary conditions of the hospitals and barracks were satisfactory, but the majority of the buildings are on the low level and not far from the city, where the Chinese live, which constitutes a danger to the troops when outbreaks of epidemic diseases occur. During the year (1903) there were 1,422 cases of plague among the civil population, mostly Chinese, but only two cases in the Garrison, both officers, whose quarters, at Murree Barracks, overlook the main road in which a large number of Chinese congregate.

South China.

The prevalence of malaria has declined considerably as compared with the previous year, and it is considered that this is chiefly owing to the efforts made to get rid of mosquitoes and their *larvæ* by the removal or treatment, as far as possible, of all likely breeding places. Amongst the means adopted were the clearing of the undergrowth in the vicinity of the barracks; the careful use of kerosine oil on any pools likely to contain mosquito *larvæ*; the fumigation of barracks, quarters and basements, with the object of destroying the insect itself; the use of quinine as a prophylactic; and the issue of mosquito nets to the troops and their families.

Electric light and electric fans have been brought into use in the hospital for soldiers wives and children, adding much to the comfort and well-being of the patients.

The school for men and for elder children is situated in the prison building and is quite unsuitable; there is no latrine accommodation for the children, and some of the doors open into the prison yard, and the benches for the children have no supports. These and other defects have been brought to the notice of the General Officer Commanding with the view of proper school accommodation being provided.

The new military hospital at Bowen Road is in course of construction, but will probably not be ready for use for some time.

In F. Block, Station Hospital, Victoria, provision has been made for two baths together with an apparatus for heating water. In C Block a room has been set apart as an operating room, and such alterations as were needed to make it suitable for the purpose have been carried out, and it has been fitted with the aseptic furniture as laid down in Appendix No. 10, Regulations for Army Medical Services.

The "Women and Girls' Protection Ordinance," is reported to be working satisfactorily.

XV.—ON THE HEALTH OF THE TROOPS SERVING IN THE NORTH CHINA COMMAND.

Sickness and Mortality.

North China.

The average strength of the troops serving in the North China Command during the year was 472, and consisted of detachments of the Royal Garrison Artillery, Royal Engineers, Nottinghamshire and Derbyshire Regiment, and Garrison Staff and Departments. The stations occupied by these were Peking and Tien-tsin, with average strengths of 256 and 216 respectively.

The following table shows the admission, mortality, invaliding rates, &c., among the non-commissioned officers and men :—

1903.	Average Strength.	Admissions.	Deaths.			Invalids.		Average Constantly Sick.	Ratio per 1,000 of Strength.				
			In the Command.	Of Invalids.	Total.	Sent Home.	Finally Discharged.		Admissions.	Deaths.	Invalids Sent Home.	Invalids finally Discharged.	Constantly Sick.
Peking ..	256	204	3	—	3	4	—	10·90	796·9	11·72	15·63	—	42·58
Tien-tsin	216	165	6	—	6	4	—	12·02	763·9	27·78	18·52	—	55·56
Total ..	472	369	9	—	9	8	—	22·92	781·8	19·07	16·95	—	48·56

The ratios of admission, mortality and constantly sick, as may be seen in the above table, were 781·8, 19·07, and 48·56 per 1,000 respectively. The average sick time was 17·72 days, and the average duration of each case of sickness 22·67 days.

In Abstract XXXIV is a table showing the health statistics for the different corps which served in the Command during the year. The Royal Artillery, with an average strength of 49, gave an admission ratio of 877·6, and a constantly sick rate of 66·33 per 1,000; in the detachment of the Notts and Derby Regiment, average strength 382, the corresponding rates were 827·2 and 49·79 per 1,000. Of the deaths, 7 occurred in the Infantry, giving a ratio of 18·32, and there was 1 each in the Royal Artillery and Garrison Staff and Departments.

In Abstract XXIA is a table showing the principal statistics of sickness, mortality, &c., arranged *according to* the various sections of disease.

North China. GENERAL DISEASES.—There was 1 admission for small-pox at Peking where an epidemic existed at the time, and there was also a single admission for measles at the same station. *Influenza* caused 2 admissions, 1 each at Peking and Tien-tsin. *Enteric fever* caused 9 admissions, giving a ratio of 19·1 per 1,000; 6 of the admissions occurred at Peking and 3 took place at Tien-tsin; the origin of infection could not be traced. *Simple continued fever* gave 2 admissions, or a ratio of 4·2 per 1,000, and *dysentery* with 6 admissions gave a ratio of 12·7 per 1,000; the former occurred at Tien-tsin, while the latter were equally divided between Peking and Tien-tsin. *Malarial fevers* were the cause of 19 admissions, 13 for ague and 6 for remittent fever, equal to a ratio of 40·3 per 1,000; 7 of the cases of ague and 5 of remittent fever occurred at Peking. Under *septic diseases* 3 admissions are recorded, 2 for erysipelas and 1 for septicæmia, the ratio being 6·4 per 1,000; 1 of the cases of erysipelas and the case of septicæmia terminated fatally. For *tubercular diseases* there were also 3 admissions, all for tubercle of lung.

Venereal diseases.—There were 46 admissions for *primary syphilis*, equal to a ratio of 97·5 per 1,000. If to this be added the sickness from soft chancre, for which there were 24 admissions and 1·42 men constantly sick the total admission ratio for primary venereal sores equals 148·3 per 1,000. *Secondary syphilis*, with 27 admissions, gave a ratio of 57·2 per 1,000, and *gonorrhœa*, with 122 admissions, equalled a ratio of 258·5 per 1,000.

Taking all forms of venereal disease together, the total admission ratio was 464·0 per 1,000, and the ratio for constant inefficiency amounted to 31·14 per 1,000.*

For *parasitic diseases* there were 7 admissions, comprising 6 of scabies and 1 of ringworm. The ratio equalled 14·8 per 1,000.

Under *alcoholism* 2 admissions were recorded, and there were also 2 admissions for *rheumatism*. *Debility* was represented by a single admission; and *other general diseases* gave 3 admissions, 2 for non-malignant new growth, and 1 for congenital malformation.

LOCAL DISEASES.—*Diseases of the Nervous System* were represented by a case each of multiple neuritis and meningitis, of which the latter terminated fatally.

Under *diseases of special sense* there was 1 admission for detachment of retina and 1 for inflammation of membrana tympani.

Diseases of the Respiratory System caused 7 admissions, equal to a ratio of 14·8 per 1,000. The admissions comprised 4 cases of bronchial affections and 3 of pneumonia.

Diseases of the Digestive System were the cause of 13 admissions, or a ratio of 27·5 per 1,000. The cases comprised:—5 of hepatic affections, 3 disorders of mouth and throat, 2 inflammation of intestines, and 1 each of hernia, constipation and inflammation of stomach. A death occurred from abscess of liver.

Diseases of the Lymphatic System.—Under this head 7 admissions, all from inflammation of lymphatic glands, are recorded, giving a ratio of 14·8 per 1,000.

Under *urinary disorders* a single admission for calculus in ureter is recorded.

Diseases of the Generative System, with 35 admissions, equalled a ratio of 74·2 per 1,000. In addition to the 24 cases of soft chancre, previously referred to under venereal diseases, there were 8 cases of orchitis, and 1 each of paraphimosis, stricture of urethra and inflammation of prostate.

Diseases of the Organs of Locomotion were represented by 3 admissions for synovitis and 1 for myalgia, and *diseases of the connective tissue* gave 3 admissions for abscess and 1 for inflammation.

For *diseases of the skin* there were 5 admissions recorded, 3 for ulcer and 1 each for eczema and pemphigus.

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* There were no admissions for ulcer of penis of non-venereal origin.

INJURIES.—Under this head were recorded 26 admissions all for *local injuries.* The admission rate was 55·1 per 1,000. The causes of admission were 13 sprains, 8 wounds, 2 fracture, and 1 each gunshot wound, dislocation and contusion. The case of gunshot wound which occurred at Tien-tsin, was self-inflicted and terminated fatally; an inquest was held which returned a verdict of suicide whilst in a state of temporary insanity; there was also a death, out of hospital, due to suffocation from submersion.

SURGICAL OPERATIONS:—Comprised 9 on lymphatic glands, 1 for abscess of liver, and 1 on genital organs; all of which were performed at Peking. Chloroform was the anæsthetic used in each instance.

INVALIDING.—There were 8 men invalided to England during the year, equal to a ratio of 16·95 per 1,000. Of the men invalided, 1, or 20·41 per 1,000 belonged to the artillery, and 7, or 18·32 to the Infantry. The causes of invaliding were, 2 for tubercle of lung, and 1 each for ague, rheumatism, non-malignant new growth, debility, detachment of the retina, and inflammation membrana tympani.

OFFICERS.—In an average strength of 18, there were 6 cases of sickness, equal to a ratio of 333·3 per 1,000. The causes of admission were septicæmia, disordered action of heart, bronchitis, tonsillitis, congestion of spleen and orchitis, 1 case respectively.

VACCINATION.—There were 25 cases of re-vaccination amongst soldiers, 11 of which proved failures. The lymph was obtained from the Health Officer, Shanghai.

SANITARY CONDITIONS.

The Senior Medical Officer (Major W. Westropp White, M.D., I.M.S.), in forwarding the Station Hospital returns and reports for Peking and Tien-tsin, states that, having only just taken over the duties of Senior Medical Officer, he is not in a position to furnish a detailed report on the sanitary conditions. The following remarks are taken from the reports of the Medical Officers of the hospitals at the above stations:—

Peking.—The barracks, hospital, &c., consist entirely of converted Chinese buildings, and are not suitable, except as a temporary measure, for the housing of troops, as they are cold in winter and hot in summer. They have been condemned, and new buildings are to be erected. The situation of the existing buildings is good, the area of the British Legation Guard being somewhat higher than for the other Legation Guards. They are built of brick, plaster, and wood, and roofed with tiles. The rooms are kept as clean as circumstances permit, but, owing to the amount of dust in Peking, it is a matter of difficulty to keep these old buildings as they ought to be.

The condition of the bath-houses are unfavourably reported on, and the means of disposing of the dirty water is unsatisfactory. The washing arrangements are said to be sufficient for the number of troops, but in winter time the floors are covered with ice, the cold being intense.

The latrine buildings are well constructed and under careful supervision, but the system of collection and removal is not all that could be desired.

The water for drinking and cooking purposes, which is stated to be of good quality, is obtained from a shallow well, sunk by the Royal Engineers in the Legation Guard; it is conveyed in pipes to the distiller, and from thence it is distributed, under European supervision, to the barracks and cookhouses, and stored in covered chatties. The amount distilled amounts to about a gallon per head per diem which is found to be sufficient.

North China

A constant menace to the health of the Legation and the Legation Guard is a canal, which drains the Imperial palace and runs along the east boundary of the Legation. This is extremely foul and smells badly in summer, but it is outside the military area.

Tien-tsin.—The barracks are situated in the British Concession and consist of 4 rooms, which are occupied by the rank and file, additional accommodation being afforded for the regimental police and non-commissioned officers. The flooring is described as unsatisfactory to clean, as the water runs through the spaces in the flooring into the room below. The bath and ablution rooms are on the whole satisfactory. They are drained by means of a gutter into a concrete tank outside, from which the water is removed by means of buckets. There are eight cubicles for baths, and warm water is obtainable. The warming, which is by means of two stoves, is satisfactory. The drinking water is obtained from the river and thoroughly filtered by means of sand filter-beds and boiled before being sent to barracks. The latrines are said to be well ventilated, lighted, and warmed. The structural changes and constructions carried out during the year were as follows:—cookhouse, wash-house, and latrine erected; compound raised to the level of main road. Recommendations were also made regarding the renewal of the floor of wash-house so as to allow the water to drain away easily.

XVI.—ON THE HEALTH OF THE TROOPS SERVING IN THE STRAITS SETTLEMENTS.

Sickness and Mortality.

I.—European Troops.

Straits Settlements.

The average strength of warrant officers, non-commissioned officers, and men serving in the Straits Settlements was 813. The troops stationed in the Command throughout the year were Nos. 62 and 64 Companies and district staff Royal Garrison Artillery, half 41st Company, Singapore Company and Supernumerary Staff Royal Engineers, detachments Army Service Corps, Royal Army Medical Corps, Army Ordnance Corps, and Army Pay Corps.

The 1st Manchester Regiment arrived from South Africa in March.

In the following table are given the admission, mortality, and invaliding rates, &c., among the troops serving in the Command :—

1903. Average Strength.	Admissions.	Deaths.			Invalids.		Average constantly Sick.	Ratio per 1,000 of Strength.				
		In the Command.	Of Invalids.	Total.	Sent Home.	Finally Discharged.		Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
813	1422	12	—	12	29	9	61·74	1749·1	14·76	35·67	11·07	75·94

The admission and constantly sick rates are higher than in 1902 by 796·1 and 21·58 respectively, and also above the average rates for the preceding ten years by 674·9 and 11·65 per 1,000. The death rate is lower by 1·60 in the former but higher by 7·49 in the latter comparison. The average sick time to each soldier was 27·72 days, which is longer by 7·88 days than in 1902, and than the average period for the ten years 1893–1902 by 4·26 days. The average duration of each case of sickness was 15·85 days, which is shorter than in the previous year by 4·97 days but longer than the average period by 5·99 days.

In Abstract XXXIV is a table showing these health statistics for the various regiments and corps which served in the Command during the year. In the Royal Artillery the admission rate was 1806·3 and the constantly sick rate 91·06 per 1,000, as compared with 966·9 and 54·76 in the previous year. There were three deaths as against two in 1902. The admission rate in the Royal Engineers was 1,480·0 per 1,000, the corresponding rate in the previous year being 1,165·2; there was one death as

traits ettlements.

compared with four in the preceding year. The Infantry gave an admission rate of 1,914·5 and a death rate of 20·72 per 1,000. In the previous year there was no infantry regiment in the command. The Garrison Staff and Departments gave an admission ratio of 511·6, as compared with 261·9 per 1,000 in the preceding year.

The sickness and mortality among the troops, arranged according to the ages of the men, are shown in the following table :—

Ages.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 20 years ..	33	46	—	1	1,393·9	—	30·30
From 20 to 25 years..	390	861	4	15	2,207·7	10·26	38·46
„ 25 „ 30 „ ..	277	422	6	8	1,523·5	21·66	28·88
„ 30 „ 35 „ ..	76	69	1	3	907·9	13·16	39·47
„ 35 „ 40 „ ..	34	21	—	2	617·6	—	58·82
Over 40 years ..	3	3	1	—	1,000·0	333·33	—
Total ..	813	1,422	12	29	1,749·1	14·76	35·67

With regard to the influence of service in the Command on sickness and mortality amongst the troops, the following table has been compiled :—

Length of Service in Command.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 1 year.. ..	668	1,228	11	19	1,838·3	16·47	28·44
From 1 to 2 years ..	106	156	1	8	1,471·7	9·43	75·47
„ 2 „ 3 „ ..	23	28	—	1	1,217·4	—	43·48
„ 3 „ 4 „ ..	11	8	—	—	727·3	—	—
„ 4 „ 5 „ ..	2	1	—	1	500·0	—	500·00
„ 5 „10 „ ..	3	1	—	—	333·3	—	—
Over 10 years.. ..	—	—	—	—	—	—	—
Total ..	813	1,422	12	29	1,449·1	14·76	35·67

In Abstract XXII is a table showing the principal statistics of sickness and mortality, arranged according to the various sections of disease.

General Diseases.—*Other eruptive fevers* caused 7 admissions, all of which were due to dengue, or a ratio of 8·6 per 1,000, and there were 2 admissions for *enteric fever*, as compared with 1 in 1902.

Other continued fevers were the cause of 78 admissions or a ratio of 95·9 per 1,000, which is higher by 71·4 than the previous year's rate and by 34·3 than that of the decennial average. All the admissions were for simple continued fever. No death occurred.

Malarial fevers.—662 admissions, of which 627 were cases of ague, and 35 of remittent fever, are recorded under this head, equal to a ratio of 814·3 per 1,000, showing increase on the previous year's and decennial average rates to the extent of 413·5 and 566·6 respectively. There were 3 deaths due to remittent fever, giving a ratio of 3·69, as compared with 4·09 in the previous year and 1·01, the decennial average rate.

The following table shows the monthly prevalence of malarial fever :—

January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
56	42	17	32	43	41	61	74	67	80	56	93

Tubercular Diseases.—Under this head there were 3 admissions and 1 death. The admission rate, 3·7, is below the previous year's rate by ·4, but above the decennial average rate by ·9.

Venereal Diseases.—There were 15 admissions for *primary syphilis*, equal to a ratio of 18·5 per 1,000, showing an increase, as compared with the previous year, of 4·2, but a decrease in comparison with the average of 80·3. If to this be added the sickness for soft chancre, which caused 69 admissions with 5·10 men constantly sick, the total admission ratio from primary venereal sores amounts to 103·3 per 1,000, which is above the previous year's rate by 42·0, but below that of the decennial average by 44·5. *Secondary syphilis* was the cause of 13 admissions, or a ratio of 16·0 per 1,000 being lower by 4·5 and 79·2 respectively, than the ratio for 1902 and that of the decennial average. *Gonorrhœa*, with 165 admissions furnished a ratio of 203·0 per 1,000, which is above both the previous year's rate and that of the decennial average by 45·5 and 68·5 respectively. Including all forms of venereal diseases, the total admission rate was 322·3 per 1,000, which is 83·0 above the previous year's rate but 55·2 below that of the average for the preceding ten years. The average number of men constantly sick from venereal disease was 19·84, the equivalent ratio being 24·40 per 1,000, which is higher than the rate for 1902 by 5·28, but lower than the decennial average rate by 8·21.*

Parasitic Diseases.—There were 8 admissions, 7 for ringworm and 1 for scabies, giving a ratio of 9·8 per 1,000. In the previous year there was only a single admission for scabies under this head.

Alcoholism.—There were 4 admissions and 1 death under this head. The admission rate equals 4·9 as compared with *nil* in the preceding year and 3·4 the decennial average rate.

Rheumatism.—The admissions numbered 14 giving a ratio of 17·2 per 1,000, which is 11·1 above the rate for the preceding year, and higher than the decennial rate by 1·6.

Debility caused 21 admissions, or a ratio of 25·8 per 1,000, which is below the previous year's rate by 15·1, but above the decennial average rate by 10·3.

Other General Diseases.—There were 7 admissions as compared with none in the previous year, 6 of the cases were non-malignant new growth, and 1 diabetes mellitus.

Local Diseases.—*Diseases of the Nervous System* caused 10 admissions, equal to a ratio of 12·3 per 1,000, which is higher than the previous year's and decennial average rates by 6·2 and 4·2 respectively. The admissions comprised 2 cases of neuralgia, 2 of melancholia, and a case each of neuritis, posterior sclerosis, incomplete paralysis, epilepsy, vertigo and dementia.

Diseases of the Eye gave 2 admissions, 1 each for keratitis and ametropia, equal to a ratio of 2·5 per 1,000, which is below the rate for 1902, and that of the decennial average by 1·6 and 6·9 respectively.

* There was no admission for ulcer of penis of non-venereal origin.

Straits Settlements.

Diseases of other Organs of Special Sense, with 23 admissions, gave a ratio of 28·3 per 1,000, which is in excess of the preceding year's and average rates by 24·2 and 13·5 respectively. The admissions were 12 for inflammation, external meatus, 6 perforation membrana tympani, 4 inflammation middle ear. and 1 for accumulation of wax in external meatus.

Diseases of the Circulatory System gave 11 admissions, 3 for valvular disease and 8 for disordered action of heart. The admission rate equalled 13·5 per 1,000, and is higher than the rate of the preceding year and that of the decennial average to the extent of 7·4 and 8·8 respectively. There was 1 death, which was due to valvular disease of heart.

Diseases of the Respiratory System caused 18 admissions and 1 death. The admission rate, 22·1 per 1,000, is fractionally below the previous year's rate, but above the decennial average by 7·3. The admissions comprised 12 for bronchial affections, 3 for pneumonia, and 1 each for hæmoptysis, phthisis, and pleurisy. The death was due to pneumonia.

Diseases of the Digestive System were the cause of 68 admissions, equal to a ratio of 83·6 per 1,000, which compared with the previous year's and decennial average rates, shows an increase of 24·3 on the former and of 29·3 on the latter. The principal diseases causing admission were affections of the mouth and throat, hepatic diseases, diarrhœa, dyspepsia, and piles. A death occurred from abscess of liver.

Diseases of the Lymphatic System with 36 admissions, gave a ratio of 44·3 per 1,000, or an increase of 27·9, on the ratio for 1902, and also above the average by 12·9. Inflammation of lymphatic glands caused 35 of the admissions.

Diseases of the Urinary System.—A single admission, one of incontinence of urine, is shown as compared with 2 admissions in 1902.

Diseases of the Generative System furnished 86 admissions, equal to a ratio of 105·8 per 1,000, which, compared with the rate for the previous year and that for the average of the preceding ten years shows an increase of 38·3 and 37·4 respectively. In addition to 69 admissions for soft chancre, already referred to under venereal diseases, there were 11 for orchitis, 4 for balanitis and 2 for phimosis.

For *diseases of the organs of locomotion* there were 18 admissions, 7 being for synovitis, 6 for myalgia, 2 each for periostitis and loose body, and 1 ankylosis. The admission ratio equalled 22·1 per 1,000, showing an increase of 18·0 on the previous year's rate, and of 13·6 on the decennial average.

Diseases of the Connective Tissue caused 32 admissions, equal to a ratio of 39·4 per 1,000, and shows an increase on the previous year's rate and that of the decennial average of 29·2 and 11·5 respectively. Of the admissions, 13 were for inflammation and 19 for abscess.

Diseases of the Skin gave 38 admissions, or a ratio of 46·7 per 1,000, which is above the previous year's rate and that of the average to the extent of 34·4 and 6·2 respectively. The admissions comprised 13 cases of boil, 9 of eczema, 5 of ulcer, 3 of whitlow, 2 each of herpes, pemphigus and onychia, and 1 each of prickly heat and carbuncle.

INJURIES caused 78 admissions, the equivalent ratio being 96·0 per 1,000, showing an increase of 46·9 on the rate for 1902, and one of 9·9 on the decennial average rate. There were 6 admissions for *general injuries*, 3 for heat-apoplexy, 2 for heat-stroke, and 1 for sun-stroke. The 3 cases of heat-apoplexy and 1 case of heat-stroke terminated fatally. The admissions for *local injuries* included 25 for sprain, 18 for contusion, 16 for wounds, 6 for fracture and 4 for blisters of feet.

SURGICAL OPERATIONS comprised an operation for abscess of the liver, which terminated fatally, and two operations on male genital organs. In the latter operations the anæsthetic used was chloroform.

INVALIDING.—There were 29 men invalided to the United Kingdom during the year, giving a ratio of 35·67 per 1,000, which shows a decrease of 21·59 as compared with the previous year's rate, but an increase of 16·43 on the decennial average rate. Of the men invalided, 16, or 56·34 per 1,000, belonged to the Royal Artillery, 7, or 70·00 per 1,000, to the Royal Engineers, 4, or 10·36 per 1,000, to the Infantry, and 2, or 46·51 per 1,000, to Garrison Staff and Departments.

With regard to age, 1 man, or 30·30 per 1,000, was under 20 years, 15 men, or 38·46 per 1,000, were between 20 and 25 years, 8 men, or 28·88 per 1,000, were between 25 and 30 years, 3 men, or 39·47 per 1,000, were between 30 and 35 years, and 2 men, or 58·82 per 1,000, were between 35 and 40 years of age. As to length of service in the Command, 19 men, or 28·44 per 1,000, were in their first year, 8 men, or 75·47 per 1,000, were in their second year, 1 man, or 43·48 per 1,000, was in his third year, and 1 man, or 500·00 per 1,000, was in his fifth year.

The causes of invaliding were 13 for malarial fevers, 3 for debility, 2 each for nervous diseases, circulatory diseases, and digestive disorders, and 1 each for enteric fever, rheumatism, diabetes mellitus, melancholia, ametropia, perforation of membrana tympani, and phthisis.

Nine men were discharged the service during the year as medically unfit, 2 each for nervous affections and mental diseases, and 1 each on account of malarial fever, debility, diabetes mellitus, ametropia, and local injury. The ratio per 1,000, 11·07, is higher than that of the previous year by 6·98, and than the decennial rate by 3·98.

OFFICERS.—In an average strength of 46, there were 24 cases of sickness, equal to a ratio of 521·7 per 1,000, as compared with 947·4 in the previous year. The chief causes of admission were ague 9 cases, local injuries 5 cases, digestive disorders 3 cases, and simple continued fever 2 cases. There was no death, but two officers were invalided to England on account of ague and enteritis respectively.

WOMEN.—In an average strength of 51, there were 47 cases of sickness, equal to a ratio of 921·6 per 1,000, or a decrease of 614·1 per 1000, as compared with the previous year's rate. The chief causes of admission were malarial fevers (19), debility (7), digestive disorders (6), and dengue (4). A death occurred from remittent fever.

CHILDREN.—The average strength was 78, and there were 36 admissions and 3 deaths, equal to ratios of 461·5 and 38·46 per 1,000 respectively. In the previous year the corresponding ratios were 688·5 and 32·79 per 1,000. Malarial fevers, digestive disorders, inflammation of lymphatic glands, dengue, simple continued fever, enteric fever, tubercle, eclampsia, and bronchial affections were the chief causes of admission. The deaths were due to enteric fever, eclampsia, and suffocation from submersion.

VACCINATION.—Of 10 primary vaccinations among the children 6 were successful, and 4 were failures. Of 4 re-vaccinations among the women 2 are recorded as perfect, and 2 as modified. Of 9 men re-vaccinated, 3 cases were failure, and of 1 man primarily vaccinated the result was perfect. The lymph was, for the most part, obtained from the Pasteur Institute, and is stated to have been of good quality.

II.—Asiatic Troops.

traits ettlements.

The force consisted of the 2nd Company Hong Kong-Singapore Royal Artillery, the Singapore Company Royal Engineers, the 3rd Madras Light Infantry, who proceeded to India in March, the 70th Carnatic Infantry, and a small number of the Malay State Guides, which arrived in Blakan Mati during November.

The average strength of the Asiatic troops was 939, the admissions numbered 442, and the average number constantly sick 24·14.

There were 6 deaths due respectively to dysentery (1), remittent fever (2), tubercle of lung (1), syncope (1), and inflammation of liver (1). There were 9 invalids discharged the service, 4 for beri-beri, 3 for debility, and 1 each for keratitis and dislocation of shoulder.

The ratio of admission, was 470·1, that of death 6·39, and of constantly sick, 25·71 per 1,000. The chief causes of admission were malarial fevers, beri-beri, dysentery, parasitic diseases, local injuries and debility.

Sanitary Conditions.

The Senior Medical Officer (Lieut.-Colonel W. Dick, M.B., R.A.M.C.), states that malarial diseases prevailed during the year, and were partly due to the arrival of troops from Hong Kong who were already affected by the disease, and partly to the jungle, more especially in the islands of Blakan Mati and Pulo Brani, not being sufficiently cleared, together with defects in surface drainage. Every effort has been exerted to combat the disease by destroying the breeding grounds of the mosquito, in clearing the jungle in the vicinity of barracks, improving the surface drainage, and by the use of kerosine oil on all stagnant water. Mosquito curtains have also been in more general use than formerly.

About 200 cases of cholera occurred among the native population during the dry season, but owing to the precautionary measures taken, no case occurred among the troops.

Blakan Mati and *Pulo Brani* are said to be healthy otherwise than as regards malaria. The surface drainage has been considerably improved and the extension of the drains is being carried out. A water catchment area has been completed at Pulo Brani, so that now there is a good supply of pure rain water. The hospital at Blakan Mati is now fully equipped for 60 beds.

Fort Canning is described as healthy, being situated on a hill. The water supply is municipal and still carried in carts to barracks, but no evil effects seem to have resulted from this.

At *Tanglin* the surface drainage has been considerably improved, but much yet remains to be done in this direction as many of the drains are of faulty construction and others have little or no fall.

XVII.—ON THE HEALTH OF THE EUROPEAN TROOPS SERVING IN INDIA.

Sickness and Mortality.

India.

The average strength of European troops serving in India during 1903 was 69,613 warrant officers, non-commissioned officers and men, as compared with an average strength of 60,540 in 1902. There was thus an increase of 9,073 on the preceding year.

The following table shows the admission, death, invaliding and constantly sick rates amongst the troops during the year :—

1903. — Average Strength.	Admissions.	Deaths.			Invalids.		Average constantly Sick.	Ratios per 1,000 of Strength.				
		In the Command.	Of Invalids.	Total.	Sent Home.	Finally discharged.		Admissions.	Deaths.	Invalids sent Home.	Invalids finally discharged.	Constantly sick.
69,613	72,081	896	32	928	2,062	109	4,397 ·17	1,035 ·5	13 ·33	29 ·62	13 ·06	63 ·17

The health of the troops was exceptionally good ; the admission ratio was lower than that for any of the preceding twenty-two years. Compared with the corresponding ratios in the preceding year there is a decrease in the admission and constantly sick rates of 42·9 and 2·83 per 1,000 respectively and also decreases in the invaliding rate of 7·61 per 1,000, and in the death rate of 2·03 per 1,000. Compared with the similar average ratios for the preceding ten years the admission, death, and constantly sick rates show decreases of 291·6, 2·28, and 20·87 per 1,000 respectively, while a decrease of 2·00 is also observed in the invaliding rate.

The average sick time to each soldier was 23·06 days, which is shorter than in the previous year by 1·03 days, and less than the decennial average by 7·61 days.

The loss to India by deaths and invaliding to England was 2,958 warrant officers, non-commissioned officers and men, being at the rate of 42·49 per 1,000, a decrease of 9·43 on the rate in the previous year, and a decrease of 4·14 on the average rate for the preceding ten years.

In Abstract XXIV is a table showing the prevalence of sickness and mortality in the different military districts. In 1902 the highest admission ratios occurred in the Deesa (1,639·5), Nagpur (1,458·8), and Mhow (1,433·7) districts. This year the highest admission ratio, 1,667·7 per 1,000, occurs in the Rangoon district, which is an increase of 521·1 on the admission ratio for 1902, when this district held the eleventh place. The next highest admission ratios were 1,582·2 in the Nagpur district, showing an increase of 123·4 on the previous year's rate and 1,578·9 per 1,000 in

India.

the Aden district, an increase of 384·7. In the Rangoon district the prevailing diseases were malarial and eruptive fevers, venereal and diseases of the digestive system. In the Nagpur district malarial fevers, venereal and skin diseases, and injuries were the chief causes of admission, and in the Aden district the most prevalent diseases were malarial fevers, venereal diseases, and injuries. Quetta district had the lowest admission ratio for the year, 691·1 per 1,000, which is 172·3 less than the admission rate for the preceding year, and is due to a decrease in the admissions for diseases of the digestive system, venereal disease, and enteric fever. The next lowest admission ratios were 811·9 per 1,000 in the Rohilkhand district, and 866·3 in the Rawal Pindi district, the former showing a decrease of 5·4 as compared with the previous year, chiefly caused by a decreased admission rate for venereal disease, and the latter showing a decrease during the same period of 105·0, also caused by a decreased admission rate for venereal diseases. The lowest admission ratios in 1902 were in the Rohilkhand (817·3), Quetta (863·4), and Bombay (895·1) districts. Among districts other than those already referred to which show increased admission rates the most notable instances are the Belgaum, Bombay, Southern, Bundelkhand, and Peshawar districts, which in the order named show an increase of 259·2, 153·6, 137·1, 67·3, and 15·2; the increase in the first instance being chiefly due to an increased admission rate for malarial fevers and diseases of the digestive system; in the second to parasitic and malarial fevers; in the third to venereal diseases; in the fourth to diseases of the digestive system, debility, and enteric fever; and in the fifth and last instance to debility. Excluding the three already mentioned, fourteen other districts show decreased admission rates, the decreases varying from 2·3 in the Lahore district to 418·1 in the Mandalay district. The improvement in the latter district was due to a decrease in the admission rate for malarial fevers. Other notable instances were a decrease of 394·2 in the admission ratio of the Deesa district, where there was a large diminution in the admission rate for venereal disease and malaria; and a decrease of 277·4 in the Narbudda district, largely the result of decreased prevalence of malarial fevers and venereal diseases.

The highest rates of mortality were 25·59 per 1,000 in the Allahabad district, 22·72 in the Mhow district, and 22·16 in the Bundelkhand district. Compared with the preceding year the death rate of these three districts show increases of 9·73, 5·20, and 3·37 per 1,000 respectively. In 1902 the highest death rates were 30·07 in the Nagpur district, 24·94 in the Bombay district and 24·10 in the Presidency district. The districts showing the lowest death rates for the year 1903 are the Southern (4·90), Secunderabad (6·49), Sind (6·72), and Bangalore district (7·74). Compared with the death rates for 1902, increased mortality is observed in fourteen districts out of twenty-six, the increases varying from ·10 in the Secunderabad district to 9·73 in the Allahabad district. Twelve districts show decreased mortality, the decreases being 19·93, 13·57, 13·24, 9·53, 9·45, 8·00, 7·31, 6·84, 3·35, 2·87, 1·51 and 1·23, in the Nagpur, Bombay, Sind, Presidency, Quetta, Deesa, Rawal Pindi, Poona, Southern Belgaum, Lahore and Rohilkhand districts respectively.

In Abstract XXV will be found the statistics of sickness and mortality at the various stations. Taking first the *stations in the plains* having an average strength of over 150 men it is observed that Barrackpore comes first with an admission ratio of 2,022·2 per 1,000, showing an increase of 552·8 on the preceding year but a decrease of 207·7 on the decennial average; like previous years malarial fevers were chiefly the cause of high admission rates. The second highest ratio was 1,809·8 at Rangoon, an increase of 598·1 on the rate for the previous year and 417·4 above the average rate for the preceding ten years. Dengue, dysentery, malarial fevers and venereal disease account for this increase. Mian Mir occupies the third place this year with a ratio of 1,772·2, an increase of 552·0 as compared with last year's rate and 289·8 below the decennial average, the unhealthiness being entirely due to the prevalence of malarial fever. Bellary comes fourth with a ratio of 1,720·2 an increase of 808·7 on last year's rate and an increase of 381·4 on the decennial average, the increase is accounted for by a general increased number of admissions from nearly all diseases during the year under report. Fort Attock shows the lowest admission rate 567·0 per 1,000 which is lower

than the previous year by 1264·8, and 852·6 less than the ten years' average. Shahjahanpur comes second with 599·6 showing a decrease of 356·4 per 1,000 on the preceding year. The third lowest ratio was 639·9 at Sitapur, a decrease on last year of 360·1 and lower than the decennial average by 470·0. There were 60 stations in the plains (excluding Bhamo which was closed during 1902) with an average strength of over 150 men and in 27 of these the admission ratios were higher than in 1902, the most notable instances in addition to those already mentioned at Barrackpore, Rangoon, Mian Mir and Bellary, being increases of 672·0 at Amritsar, 384·7 at Aden, 351·2 at Dum Dum, 314·7 at Peshawar and 230·7 at Nasirabad, in each of these stations malarial fevers were the chief causes of the high admission rates, but in the case of Dum Dum, venereal diseases, and in that of Nasirabad an outbreak of enteric fever and heat-stroke in a young and newly arrived regiment also contributed much to the increased admission rate. In 33 stations the admission rate showed decrease, the chief instances of considerable diminution being 1,264·8 at Fort Attock, 1186·2 at Mandalay, 548·1 at Nowshera, 515·9 at Delhi, 502·1 at Deesa, and 490·2 at Saugor. When compared with the decennial average ratios the admission rates showed increase in 6 stations, notably at Rangoon and Bellary, the increases being 417·4 and 381·4 respectively; while decreased rates were observed in 54 stations, the principal instances being 1,140·2 at Ahmedabad, 1009·1 at Delhi and 926·9 at Mandalay. Delhi with an average strength of 298, and an admission ratio of 1,067·1, had the highest ratio of mortality for the year, viz: 40·27 per 1,000. Of the 12 deaths for the year 3 were due to enteric fever, 2 to pneumonia, and one each to alcoholism, subdural hæmorrhage, abscess of liver, heat-apoplexy, cut throat, gunshot wound and fracture of base of skull. Dinapore, with an average strength of 563 and an admission rate of 1,188·3 had a death rate of 39·08, of the 22 deaths 8 were from enteric fever, 4 from abscess of the liver and one each from cholera, dysentery, ague, secondary syphilis, suppuration of middle ear, carcinoma, heat-apoplexy, suffocation from submersion, self inflicted wound and gunshot wound. Mian Mir with an average strength of 843 and an admission rate of 1,772·2 comes next with a death rate of 36·77 which is higher than last year's, and the decennial average rates by 18·99 and 10·91 respectively, 11 of the 31 deaths being from cholera, 5 each from enteric fever and dysentery, 3 from ague and one each from tubercle of intestines, valvular disease of heart, heat-stroke, heat-apoplexy, suffocation from compression of chest, rupture of spleen and wound of skull with fracture. Nasirabad follows with a mortality ratio of 35·66, showing increase of 24·32 and 14·15 in the two comparisons; 16 of the 24 deaths were due to enteric fever, 5 to sun-stroke and 1 each to dysentery, remittent fever and heat-stroke. The only other instance of high death rate which calls for special note is 31·11 at Barrackpore which is 27·20 lower than last year's ratio and 7·65 below the decennial average; of the 7 deaths 4 occurred from abscess of the liver and one each from enteric fever, Bright's disease, and dysentery. For the tenth year in succession there were no deaths at Fort Fulta (average strength 13), nor were there any during the year at Fort Chingrikhal (46), Campbellpore (229), Lucknow Military Prison (25), Fort Attock (224), Calicut (92), Port Blair (139), and Sitabaldi (65). Next to these the lowest death rate was at Shahjahanpur 1·88 per 1,000, a decrease of 7·68 on last year's rate and 12·41 below the decennial average. Next comes Bareilly with a mortality ratio of 3·98 per 1,000, showing a decrease of 7·31 on the preceding year and 6·06 below the decennial average rate. Jullundur had the next lowest ratio 4·07 per 1,000, a decrease of 5·73 on 1902 and of 8·66 on the decennial average rate. Of the 60 stations in the plains with an average strength of over 150 men, 30 had increased mortality, of which Delhi and Dinapore already referred to, and Neemuch, had the largest increases. There was a lower death rate at 30 stations, the most notable instances being decreases of ·21 at Belgaum and 1·28 at Lucknow.

Among the twelve *hill depôts and sanitaria** Taragarh, for the fourth year

* The high admission rate at these stations is caused from the fact that they are all used as convalescent *depôts for the* sick from other stations in India.

India.

in succession, had the highest admission ratio, 2,090·9 per 1,000; this is 52·0 lower than 1902, and 261·1 above the decennial average; the high admission ratio was due to the debilitated condition of convalescents sent to Taragarh for change of air, most of these being cases of simple continued fever. Kasauli had the next highest admission ratio, 1,474·1 per 1,000, 83·7 higher than the rates for the preceding year, but a decrease of 249·5 on the decennial average. Mount Abu comes third with 1,371·9 per 1,000, a decrease of 181·9 compared with last year, and 98·7 below the decennial average; the decrease is due to fewer cases of venereal disease having been sent up from the plains. Wellington* is fourth with an admission rate of 1,137·5 per 1,000, an increase of 149·2 on last year, and a decrease of 40·7 on he decennial rate; the prevalence of disease at this station is chiefly due to increased admissions for many of the diseases, including venereal. Fifth on the list is Landour, 1,103·8 per 1,000, an increase of 88·3 on the preceding year's rate, but 186·7 below the average ratio. The greatest increase in the admission ratio being at Wellington*, where the rate was 1,137·5 per 1,000, as compared with 988·3 in the preceding year, and 1,178·2, the ten years' average rate, the increase being attributed to the prevalence of venereal disease, discase of the digestive system and injuries. Murree, for the fourth consecutive year shows the lowest admission rate, 484·4 per 1,000; the next lowest admission rate was 656·3 per 1,000 at Pachmarhi,* 279·2 lower than the rate for the preceding year, and 717·0 below the decennial rate; Purandhur comes next lowest, 705·0 per 1,000, an increase of 27·3 on 1902, but a decrease of 295·9 on the decennial average. The remaining hill depôts and sanitaria compare with the preceding year's and the decennial average rates as follows:—Dalhousie* 806·4, lower by 683·7 and 578·9, Naini Tal 922·5, lower by 156·9 and 86·8, Darjeeling* 962·1, lower by 118·1 and 26·1, and Khandalla 1,090·9, lower by 4·3 and 142·1. The highest mortality ratio was 42·25 per 1,000 at Naini Tal, an increase of 2·57 on the corresponding rate for last year and 17·98 above the decennial average rate; this high mortality ratio represents 6 deaths occurring at a station with an average strength of 138, the causes of death being 2 from abscess of the liver and 1 each from cholera, dysentery, erysipelas and secondary syphilis. The next highest ratio, 39·06, occurred at Murree (with an average annual strength of 42) as compared with 57·97 and 44·64 last year's and the decennial average rates respectively. Of the 5 deaths that occurred, 1 each was due to enteric fever, secondary syphilis, bilharzia hæmatobia, hæmorrhage pulmonary apoplexy and abscess of liver. Pachmarhi* is third with 23·44, a decrease of ·75 on the death rate for 1902, and 6·43 higher than the average death rate of the preceding ten years; of the 3 deaths, 2 were due to enteric fever and 1 to intussusception. Khandalla, which came fourth last year with 31·75 as its ratio, comes next with a ratio of 22·73, as compared with a decennial rate of 13·62. During the year, deaths occurred in eleven out of the twelve hill depôts and sanitaria, Taragarh being the only one free from mortality. The next lowest mortality ratio was 4·45 at Dalhousie,* a decrease of 10·08 and 8·81 in the two comparisons. The next lowest mortality was 4·58 at Wellington,* as compared with 9·55 last year and 5·95 the decennial average rate. Next in order comes Kasauli with 10·36, as compared with 15·02 and 19·55 last year's and the average rates respectively. Landour, which last year had a death rate of 25·91, has this year a mortality ratio of 10·93, showing a decrease on the decennial average of 6·26.

Of the *hill stations* garrisoned by healthy troops only, and having an average strength of over 150 men, Camp Gharial shows the highest admission ratio, 1,245·5 per 1,000, being an increase of 372·1 on the rate for the preceding year, and 361·6 higher than the average decennial rate; the increase was due to the prevalence of venereal disease and malarial fevers. Dagshai comes second with 1,195·9 per 1,000; the prevalence of ague and venereal disease were chiefly responsible for the increase of 125·6

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* Stations marked * are occupied by healthy and convalescent men. The remainder are for convalescents only.

and 106·7 on the preceding year's and the decennial rates respectively. Chakrata is third with an admission rate of 860·4 per 1,000, a decrease of 377·4 on last year's rate and also a decrease of 215·5 on the ten years' average. The lowest admission ratio was 349·0 per 1,000, at Camp Thobba, a decrease of 829·9 compared with 1902, and also 727·2 lower than the decennial average. The next lowest rates were 470·6 at Upper Topa, and 498·5 at Cherat, which show a decrease on the admission rates for 1902 of 166·2 for the latter station, the former station being closed in 1902, and the decennial averages also showing decreases of 176·3 and 533·1 respectively. The highest mortality ratio was 21·28 per 1,000 at Cherat, with an average strength of 329, showing an increase of 12·22 as compared with 1902, but lower than the decennial average rate by 1·76; of the 7 deaths, 3 were due to enteric fever, and 1 each to carcinoma of the pancreas, valvular disease of heart, jaundice and aneurysm. Bara Gali, with an average strength of 52, had the next highest death rate, 19·23, which is the same as last year, but 12·43 above the decennial average rate; the ratio represents 1 death from alcoholism. Ranikhet (average strength 1,207) comes next with a death rate of 19·06, as compared with 10·54 in the preceding year; the ratio is equivalent to 23 deaths, of which cholera is responsible for 16, enteric fever 4, abscess of liver 2, and dysentery 1. No deaths occurred at Solon (average strength 215), Khyra Gali (48), Kalabagh (53), Upper Topa (238), and Lower Topa (106).

In Abstract XXXV will be found the general health statistics of the different arms of the service, as well as of the individual corps which served in India during the year.

The average strength of cavalry was 5,507, and there were 6,306 admissions, with 96 deaths, the average number of men constantly sick amounting to 405·72. The ratio of admissions was 1,145·1, that of mortality 17·43, and that of constantly sick 73·67 per 1,000. Compared with the corresponding ratios for 1902, the admission rate has decreased by 75·0, and the death and constantly sick rates have increased by 3·20 and 4·05 respectively. The average sick time to each soldier was 26·89 days, being 1·48 days longer than in the preceding year, and the average duration of each case of sickness was 23·48 days, or 2·65 days more than in 1902.

The average strength of artillery was 12,944, and there were 14,242 admissions with 203 deaths, the average number constantly sick being 835·45, giving admission, death and constantly sick ratios of 1,100·3, 15·68, and 64·54 per 1,000 respectively, which, when compared with the rates for 1902, show decreases of 57·9, 3·25 and 1·38 respectively. The average sick time to each soldier, 23·56 days, was less by ·50 of a day, than in the preceding year, and the average duration of each case of sickness, 21·41 days, was longer by ·64 of a day.

The infantry, with an average strength of 47,357, had 48,479 admissions with 559 deaths, and an average number constantly sick of 2,926·30. The admission, death and constantly sick ratios were 1,023·7, 11·80 and 61·79 per 1,000 respectively. When compared with the rates for 1902, they show a decrease of 54·9, 2·38 and 2·92 respectively. The average sick time to each soldier was 22·55 days, or shorter by 1·07 days than in 1902, and the average duration of each case of sickness was 22·03 days, which is longer than in the previous year by ·13 of a day.

The following table shows, as far as possible, the statistics of sickness, mortality and invaliding among the troops according to age :—

India.

Age.	Average Strength.	Admissions.	Deaths.	Invaliding.	Ratios per 1,000 of Strength.		
					Admissions.	Deaths.	Invaliding.
Under 20 years ..	2,207	1,619	20	19	733·6	9·06	8·61
From 20 to 25 years	33,039	40,100	421	1,002	1,213·7	12·74	30·33
,, 25 ,, 30 ,,	23,682	23,787	304	786	1,004·4	12·84	33·19
,, 30 ,, 35 ,,	7,193	5,297	108	87	736·4	15·01	26·00
,, 35 ,, 40 ,,	1,949	995	30	42	510·5	15·39	21·55
,, 40 and upwards ..	418	246	13	27	588·5	31·10	64·59
Not stated	1,125	37	—	—	32·9	—	—
Total ..	69,613	72,081	896	*2,063	1,035·5	12·87	*29·64

* Includes 1 invalid discharged in India; excluding this the ratio is 29·62.

As in preceding years, the highest admission ratio, 1,213·7 per 1,000, occurred amongst men between 20 and 25 years of age; the 25 to 30 years period comes next with a ratio of 1,004·4, followed by 736·4 for men from 30 to 35 years of age. The ratio falls to 733·6 for men under 20 years of age to 588·5 among men from 40 years upwards, and to 510·5 for men between 35 and 40 years of age. Compared with the corresponding rates for 1902, the admission ratios show a decrease of 58·3 amongst men under 20 years of age, a decrease of 90·1 amongst those between 20 to 25 years, decrease of 66·6 amongst men between 25 and 30 years, decrease of 23·5 amongst those between 30 and 35, decrease of 38·1 amongst men in the 35 to 40 years period, and an increase of 38·8 amongst men of 40 years and upwards.

The mortality ratio was lower for all periods except amongst men under 20 years of age, and those over 40 years of age. Men over 40 years of age had the highest mortality ratio, 31·10 per 1,000, an increase of 7·54 on last year's rate, and men under 20 years the lowest, 9·06 per 1,000, an increase of 5·12. In the other age periods there were decreases of 1·95 amongst men between 20 and 25 years of age, of 2·68 in the 25 to 30 years group, of 1·43 in the 30 to 35 years group, and of 1·48 among men between 35 and 40 years of age.

The following table shows the influence of length of service in India on the sickness, mortality and invaliding amongst troops :—

Length of Service in India.	Average Strength.	Admissions.	Deaths.	Invaliding.	Ratios per 1,000 of Strength.		
					Admissions.	Deaths.	Invaliding.
Under 1 year	19,061	19,902	301	311	1,044·1	15·79	16·32
1 to 2 years	10,616	12,324	146	307	1,160·9	13·75	28·92
2 ,, 3 ,, ...	8,298	8,122	61	236	978·8	7·35	28·44
3 ,, 4 ,, ...	6,576	6,127	26	244	931·7	3·95	37·10
4 ,, 5 ,, ...	8,246	7,458	83	223	904·4	10·07	27·04
5 ,, 10 ,, ...	12,279	15,336	233	604	1,249·0	18·98	49·19
10 years and upwards	3,412	2,760	46	138	808·9	13·48	40·45
Not stated	1,125	52	—	—	46·2	—	—
Total	69,613	72,081	896	*2,063	1,035·5	12·87	*29·64

* Includes one invalid discharged in India; excluding this the ratio is 29·62.

The admission ratio was highest among men in the five to ten years' period of Indian service, and lowest among men of over ten years' service in India. There is a slight fall in the admission rate amongst men in their second year, and a further fall amongst those in their first year. Comparing the admission ratios with those in 1902, decreases are observed among men in the first, second, fourth and fifth years of Indian service to the extent 37·7, 75·2, 44·9 and 119·7, respectively, while there are increases of 29·8 amongst men in their third year 100·1 amongst men in the five to ten years' period, and 156·2 amongst men with over ten years' service in India. *India.*

With regard to mortality, the highest death rate was amongst men in the five to ten year period of Indian service, 18·98 per 1,000, an increase of ·94 compared with the preceding year's rate. The mortality ratio of the first, fourth, and fifth periods of service in India show decreases of 11·62, 7·10 and 2·29 respectively, while the second, third, 5 to 10, and over 10 years' period of service show an increase of 1·49, 1·25, ·94, and 3·57 respectively.

The sickness, mortality, and invaliding at the different ages and periods of service in India are also shown in the accompanying charts.

In Abstract XXIII will be found a table showing the admissions, deaths, invaliding, &c., according to the classification of diseases, and in Abstract XXIV will be found the sickness and mortality, for the same in each of the military districts in India.

GENERAL DISEASES.—*Eruptive fevers* caused 422 admissions and 11 deaths in 1903, as compared with 420 admissions and 4 deaths in 1902. *Small-pox* caused 68 admissions with 8 deaths, against 23 cases and 4 deaths in the previous year. The cases occurred at the following stations:—Lucknow 21 admissions, Peshawar 7, Delhi Durbar 5, four cases each at Bareilly and Agra, three each at Allahabad, Mian Mir, Bombay, and on the line of march, two each at Cawnpore, Solon and Poona, and one each at Dum Dum, Dinapore, Lucknow Military Prison, Fyzabad, Fatehgarh, Nowgong, Multan, Deolali and Aden. Of the 8 fatal cases, 4 occurred at Lucknow, 2 at Peshawar and one each at Fyzabad and Aden. At Lucknow, the first case occurred in a man of the 5th Dragoon Guards in the first week in January. Other cases followed but were not localized to any particular unit or to any special part of the station. The disease was prevalent at the time in the city, bazaars and surrounding villages, and was evidently imported into cantonments; there was apparently little connection between the successive cases. All men, women and children, were carefully examined and those not bearing satisfactory marks of vaccination were re-vaccinated. Later on, as the disease appeared to have got a firm hold on the troops, it was decided to re-vaccinate every one, irrespective of marks, in the garrison, with the result that 2,391 men, 29 women and 89 children were either vaccinated or re-vaccinated during the year. The disease disappeared in the first week in May. At Peshawar 6 of the 7 cases occurred in the 1st Somersetshire Light Infantry; the disease was prevalent among the native population but beyond this no direct source of infection could be traced. *Cow-pox* caused 12 admissions, 5 at Subathu, 3 at Lucknow, and 1 each at Bareilly, Agra, Peshawar and Bangalore; there were 8 cases of *chicken-pox*, 2 each at Fort William and Bombay, and 1 each at Ranikhet, Umballa, Rangoon and Mhow. *Measles* caused 20 admissions, 8 at Chaubuttia, of which 2 were fatal, 6 at Dagshai, 2 at Secunderabad and 1 each at Ranikhet, Jhansi, Port Blair and on the line of march. There were 5 cases of *rubella*, 3 at Bangalore, and 1 each at Darjeeling and Deolali. *Scarlet fever.*—There were 6 admissions for this disease, 2 each at Umballa and Secunderabad, and one each at Poona and Bombay. *Dengue* caused 303 admissions, with 1 death, 151 at Rangoon, 82 at Madras, (1 fatal), 59 at Thayetmyo, 6 at Secunderabad, 4 at St. Thomas' Mount, and 1 at Bhamo. At Rangoon the disease prevailed in epidemic form during the months of May, June, July, and August, it was of a mild type and the duration of each case in hospital was short. At Madras, a severe and widespread epidemic prevailed amongst the troops during the first six months of the year. At this period many scattered cases also occurred amongst the civil community, both European and in the city generally. Many of the native *infantry* quartered in the Perambur lines and the

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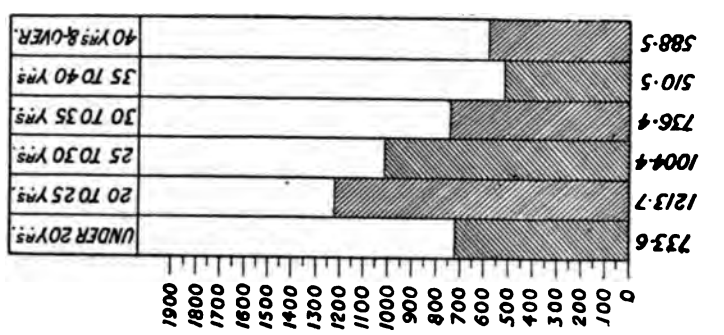
AGE IN RELATION TO SICKNESS, MORTALITY AND INVALIDING.

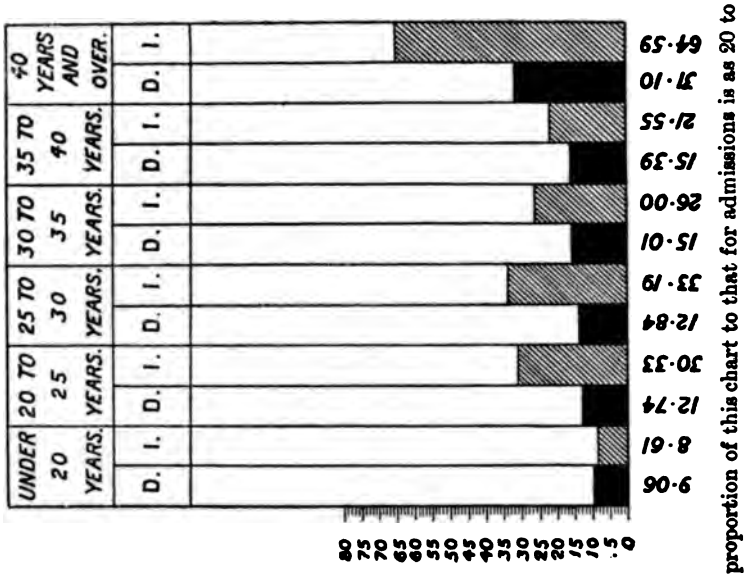
1903.

Ratios per 1,000 of Admissions.



1903.

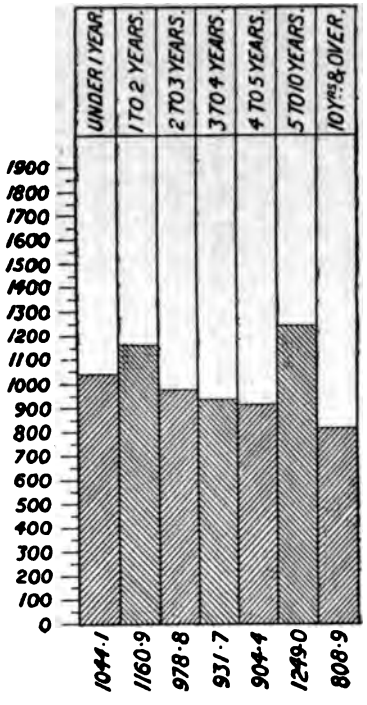
Ratios per 1,000 of Deaths and Invaliding.



The proportion of this chart to that for admissions is as 20 to 1.

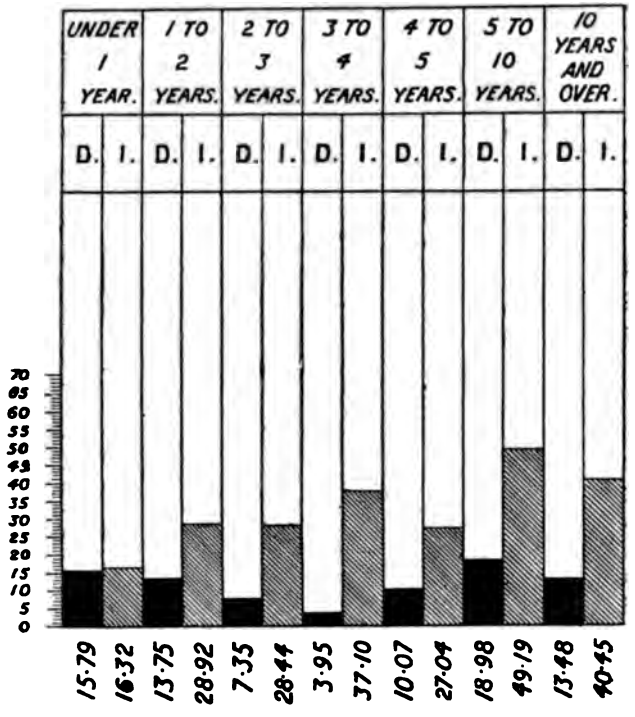
1903.

Ratios per 1,000 of Admissions.



1903.

Ratios per 1,000 of Deaths and Invaliding.



The proportion of this chart to that for admissions is as 20 to 1.

India.

"sowars" forming the Governor's Body Guard also suffered. Neither age nor sex conferred any immunity except that it was a noticeable fact that children in arms were seldom attacked. It was noted that when the disease was introduced into any building, that it appeared to cling to it with great tenacity. One case in the Royal Garrison Artillery proved fatal, the patient was of intemperate habits and failed to report sick until he was brought to hospital in a state of semi-coma and hyperpyrexia, his temperature being 110° F. the highest recordable by the ordinary clinical thermometer. The patient died a few hours after admission. To check the spread of the epidemic, isolation was carried out in all cases as far as possible, and all clothing used by infected cases was carefully disinfected. At Thayetmyo, the disease occurred in epidemic form from the end of June to the middle of August. The cases were mild and the majority recovered under hospital treatment within a week.

Plague.—There were 12 admissions with 2 deaths, against 4 admissions and 1 death in 1902. Three cases occurred at Ahmednagar, all of which recovered. Two of the admissions were from the 75th Battery Royal Field Artillery, and 1 from the 2nd Connaught Rangers, and they all occurred in September and were of the bubonic type. The origin of the disease was most probably contact with the battery syces amongst whom plague was prevalent at the time. The case in the Connaught Rangers occurred in a man employed in a shoeing class. Plague was also prevalent at the time among the native population in the city and the surrounding villages, all of which were placed out of bounds for the troops. Prophylactic measures were strictly enforced, by evacuation and disinfection of the bungalows in which the disease occurred and the syces were placed under canvas. At Mhow three cases of plague were admitted, two were mild, but the third which was of the pneumonic type, occurred in a sergeant of the Royal Horse Artillery, was severe, and proved fatal. In no case could the source of infection be traced, but the disease was prevalent among the native population at the time. Two cases occurred at Kirkee in November, the first case belonged to the 29th Battery Royal Field Artillery, and the second to the 18th Battery Royal Field Artillery. Both cases were bubonic and both recovered. The source of infection in the first case was supposed to be an infected prostitute in the bazar, where the disease was prevalent, it was out of bounds at the time and the man was on police duty. In the second case the source of infection could not be traced. At Belgaum, 1 fatal case of plague occurred in a man of the 1st Royal Warwickshire Regiment, it was of the bubonic type and was believed to have been contracted from a prostitute in the bazar, where the disease was prevalent; this woman died a few days later from plague. One case of plague occurred also at Bangalore, Poona, and Neemuch, and each case recovered.

Influenza.—There were 192 admissions with no deaths, against 107 admissions and 1 death in the previous year, giving an admission ratio of 2·8 per 1,000, as compared with 1·8 in 1902, and 6·1, the corresponding decennial average rate. The average number of men constantly sick was 8·35 compared with 3·71 in the preceding year. The greatest number of cases occurred at Fort William and Chaubuttia, where there were 22 admissions at each station. The disease occurred in the usual mild epidemic form and gave the following admissions at other stations; Barrackpore 21 admissions, Ranikhet 20, Kamptee 14, Jubbulpore 12, Bellary 11, Madras 10, Pallaveram 7, Lucknow 6, Meerut, Roorkee and Thayetmyo 4 each, Sitapur, Cawnpore, Umballa, Khanspur, Wellington, Bangalore, Rangoon and Poona 3 each, Maymyo, Kirkee and Quetta 2 each, Dum Dum, Bareilly, Jhansi, Campbellpore and Bombay 1 each.

Diphtheria.—There were no admissions, as compared with 1 in the preceding year.

Enteric Fever.—This disease caused 1,366 admissions, 292 deaths (the latter including an invalid who had left the Command), and a constant sickness of 203·88 men, as compared with 1,012 admissions, 260 deaths and a constant sickness of 151·41 in 1902. The ratio of admission was

196, that of mortality 4·19, and that of constantly sick 2·93 per 1,000. When compared with the preceding year, an increase of 52·47 is observed in the average number of men constantly sick from enteric fever, while the admission and constantly sick ratios show increases of 2·9 and ·43 respectively, the death rate, however, shows a decrease of ·10. In comparison with the decennial average rates, there was a decrease of 2·9 in the admission, of 1·75 in the death, and of ·32 in the constantly sick ratios. The percentage of mortality to attack was 21·4, compared with 25·7 in the preceding year and 26·5, the decennial average rate. Enteric fever caused 32·48 per cent. of the deaths from all causes in the Command, compared with 29·24 per cent. in 1902.

In Abstract XXVI the occurrence of enteric fever at each station and in each quarter of the year is shown. The second quarter had the largest number of attacks (445) and deaths (91), followed by the fourth quarter with 331 attacks and 86 deaths; the third quarter was next with 307 attacks and 67 deaths, whilst there were 283 attacks with 47 deaths in the first quarter. The percentage of deaths to attacks was highest, 26·0, in the fourth quarter, followed by 21·8, 20·4 and 16·6 in the third, second, and first quarters respectively. In the preceding year the third quarter had the highest percentage, followed by the second, fourth, and first in the order named.

The following tables show the admissions and deaths by commands and districts. The statistics for officers, women, and children are included to make the tables complete :—

Commands.	Warrant officers, non-commissioned officers, and men.							Officers.		Women.		Children.	
				Ratio per 1,000 of strength.									
				1903.		1902.							
	Strength.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
Bengal ..	21,146	482	96	22·8	4·54	17·4	4·17	18	1	13	3	7	—
Bombay ..	15,846	369	74	23·3	4·67	20·5	5·71	10	1	3	1	11	—
Punjab ..	17,352	354	79	20·4	4·55	18·4	5·26	13	3	7	2	4	1
Madras ..	9,337	106	26	11·4	2·78	10·1	1·85	13	2	2	1	3	1
Burma District	3,538	27	11	7·6	3·11	4·1	·75	..	—	—	—	—	—
Troops on the march	1,620	16	—	9·9	—	10·5	1·17	—	—	..	—	—	—
Delhi Durbar and Manœuvres	774	12	5	15·5	6·46	20·8	5·49	—	1	—	—	—	—
Total..	69,613	1366	291	19·6	4·18	16·7	4·29	54	8	25	7	25	2
							1902 ..	59	12	20	5	21	3

India.

From the above table it will be observed that there was an increase in the admission ratios for enteric fever in all Commands, including Burma district, which was formed into a separate Command during 1903. The Bombay Command for the fourth year in succession had the highest admission and mortality ratios for the year, the increase in both ratios being chiefly caused by outbreaks of enteric fever at Nasirabad (82 cases), Mhow (75), Poona (74), Quetta (42), and Kamptee (26). As in the preceding year the disease was least prevalent among the troops in the Burma District. The admission ratio for this District was 7·6, showing an increase of 3·5 on last year, and the mortality ratio also shows an increase of 2·36. The increases in the admission and mortality ratios are due to increased occurrence of enteric fever at all the stations in some of which there were no admissions or deaths in 1902.

Bengal Command.

Districts.	Warrant officers, non-commissioned officers and men.						Officers.		Women.		Children.	
			Ratios per 1,000 of Strength.									
			1903.		1902.							
	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
Oudh	139	20	26·4	3·80	24·1	4·34	4	—	3	1	1	—
Meerut	123	29	28·1	6·62	19·1	5·56	7	1	2	—	2	—
Bundelkhand ..	69	20	29·4	8·52	8·1	4·06	1	—	—	—	—	—
Rohilkhand ..	58	5	16·1	1·39	23·2	4·03	4	—	2	—	3	—
Allahabad ..	38	13	24·3	8·32	10·2	2·83	1	—	1	—	1	—
Narbudda ..	36	5	32·9	4·57	24·3	8·44	—	—	2	2	—	—
Presidency ..	19	4	6·6	1·39	8·2	1·63	1	—	3	—	—	—
Total ..	482	96	22·8	4·54	17·4	4·17	18	1	13	3	7	—

Bombay Command.

Districts.	Warrant officers, non-commissioned officers and men.						Officers.		Women.		Children.	
			Ratios per 1,000 of strength.									
			1903.		1902.							
	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
Mhow	177	32	65·9	11·92	35·0	8·76	—	—	1	—	4	—
Poona	87	23	20·4	5·39	28·8	6·94	5	1	1	—	3	—
Quetta	42	6	17·2	2·45	33·0	7·71	4	—	—	—	2	—
Nagpur	26	5	26·4	5·07	2·6	1·31	—	—	1	1	2	—
Bombay	16	2	7·3	·91	8·2	5·16	—	—	—	—	—	—
Deesa	12	2	17·2	2·87	8·3	3·32	1	—	—	—	—	—
Aden	5	2	5·4	2·15	7·5	2·80	—	—	—	—	—	—
Sind	4	2	2·4	1·22	4·5	1·93	—	—	—	—	—	—
Total ..	369	74	23·3	4·67	20·5	5·71	10	1	3	1	11	—

Punjab Command.

Sirhind	143	25	35·7	6·25	25·8	4·86	3	1	3	—	—	—
Rawal Pindi ..	110	25	17·5	3·97	20·3	6·75	4	—	2	1	—	—
Peshawar ..	74	22	26·1	7·77	12·6	3·90	2	2	1	1	2	—
Lahore	27	7	6·4	1·66	13·9	4·03	4	—	1	—	2	1
Total ..	354	79	20·4	4·55	18·4	5·26	13	3	7	2	4	1

MADRAS COMMAND.

Districts.	Warrant officers, non-commissioned officers and men.						Officers.		Women.		Children.	
			Ratios per 1,000 of Strength.									
			1903.		1902.							
	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
Bangalore ..	41	9	18·7	4·10	12·0	2·67	1	—	—	—	2	1
Secunderabad ..	32	8	10·4	2·59	8·8	1·47	—	—	2	1	1	—
Belgaum	14	6	8·6	3·70	8·2	2·72	2	—	—	—	—	—
Southern	12	—	8·4	—	18·2	1·65	9	2	—	—	—	—
Madras	7	3	7·2	3·09	8·6	·96	1	—	—	—	—	—
Total ..	106	26	11·4	2·78	10·1	1·85	13	2	2	1	3	1

BURMA DISTRICT.

Mandalay ..	18	9	7·0	3·51	4·3	1·23	—	—	—	—	—	—
Rangoon	9	2	9·2	2·05	3·8	—	—	—	—	—	—	—
Total ..	27	11	7·6	3·11	4·1	·75	—	—	—	—	—	—

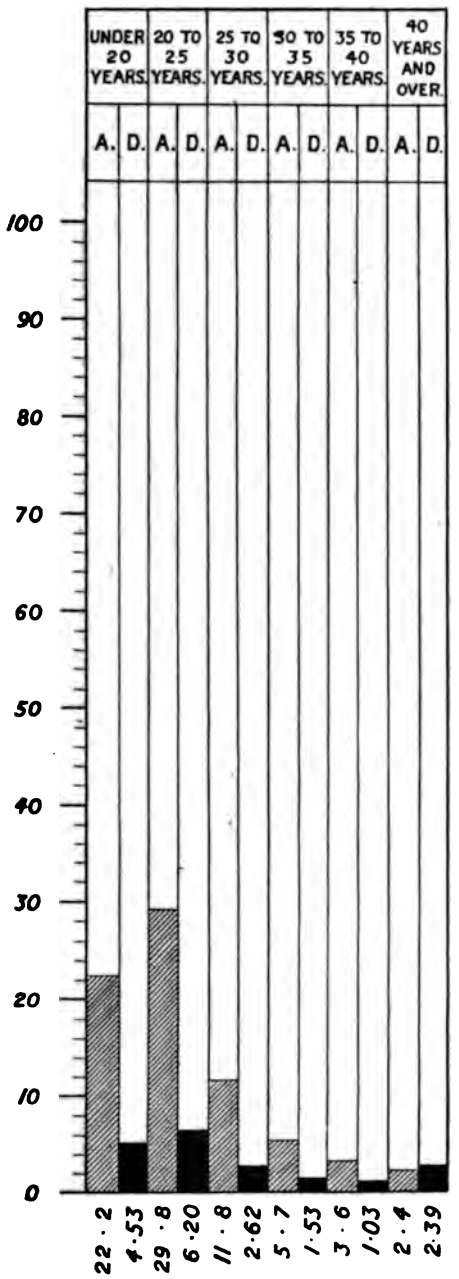
The disease occurred in every district and in all but the following sixteen stations :—Fort Fulta, Fort Chingrikhal, Dum Dum, Lucknow Military Prison, Fatehgarh, Jullundur, Bara Gali, Kalabagh, St. Thomas' Mount, Cannanore, Ramandroog, Port Blair, Maymyo, Khandalla, Ahmedabad and Sitabaldi.

The highest admission ratio, 65·9, was for the third time in the Mhow district, as compared with a ratio of 35·0 in 1902. The Sirhind district occupies the second place with 35·7, an increase of 9·9 on the admission rate for 1902. The Narbudda district comes third with a ratio of 32·9, an increase of 8·6 ; the next highest ratios, 29·4 in the Bundelkhand, 28·1 in the Meerut, and 26·4 in the Oudh and Nagpur districts, show increases of 21·3, 9·0, 2·3 and 23·8 respectively, when compared with the preceding year. Peshawar, Allahabad, Bangalore, Deesa, Secunderabad, Rangoon, Belgaum and Mandalay districts all show admission ratios higher than in

1903. *India.*

AGE IN RELATION TO CASES OF ENTERIC FEVER.

Ratios per 1,000 of strength.

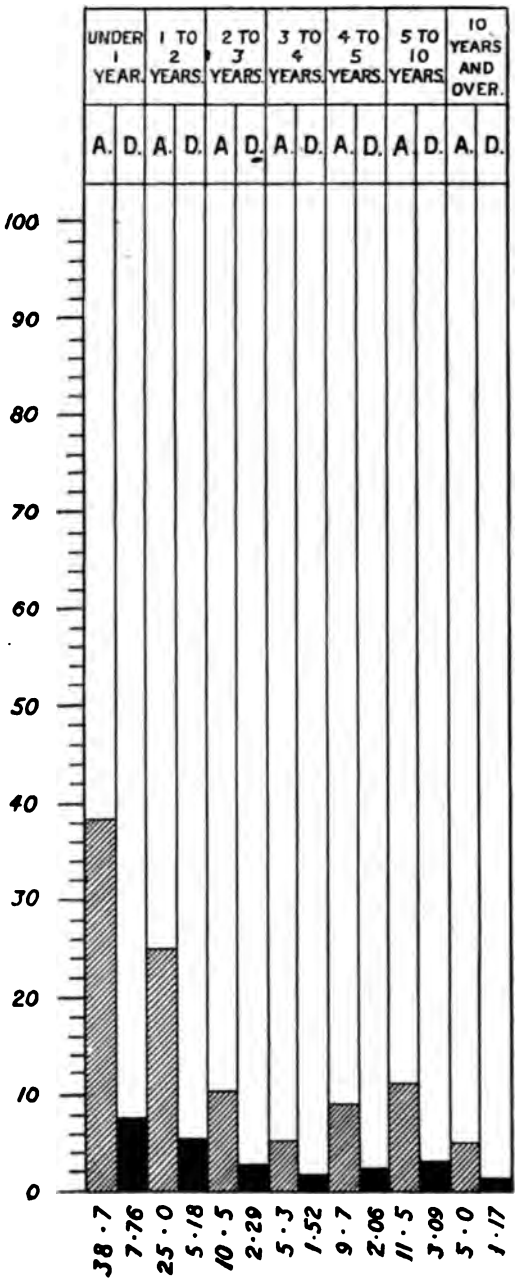


in.

1903.

SERVICE IN INDIA IN RELATION TO CASES OF ENTERIC FEVER.

Ratios per 1,000 of strength.



1902. Eleven out of the twenty-six districts show decreased admission rates, of which the chief instances are a decrease of 15·8 in the Quetta district, of 9·8 in the Southern district, and of 8·4 in the Poona district. The lowest ratio for 1903, 2·4 per 1,000, is shown in the Sind district, a decrease of 2·1 on the previous year. The Aden district comes second lowest this year with an admission ratio of 5·4 per 1,000. Other districts having an admission ratio of under 10 per 1,000 were Lahore (6·4), Presidency (6·6), Mandalay (7·0), Madras (7·2), Bombay (7·3), Southern (8·4), Belgaum (8·6), and Rangoon (9·2).

The highest mortality ratio, 11·92 per 1,000, was again in the Mhow district, an increase of 3·16 on the death rate of the preceding year. The Bundelkhand district, came second with 8·52, an increase of 4·46, and this is followed by a ratio of 8·32 in the Allahabad district, an increase of 5·49. The Southern district was the only district in which there were no deaths. Next to this, the lowest death rates were ·91 in the Bombay district, a decrease of 4·25; 1·22 in the Sind district, a decrease of ·71; 1·39 in the Presidency and Rohilkhand districts, decreases of ·24 and 2·64 respectively; and 1·66 in the Lahore district, a decrease of 2·37. Thirteen districts show higher death rates than in 1902, of which the chief instances have already been mentioned, while decreased mortality is observed also in thirteen districts, the only instances requiring notice other than those already referred to, being decreases of 5·26 in the Quetta, 3·87 in the Narbudda, 2·52 in the Rawal Pindi, 1·65 in the Southern, and 1·55 in the Poona districts.

The following tables and accompanying charts show, as far as possible, the influence of age and service in India on the incidence of enteric fever:—

Age.	Average Strength.	Admissions.	Deaths.	Ratios per 1,000 of Strength.	
				Admissions.	Deaths.
Under 20 years	2,207	49	10	22·2	4·53
From 20 to 25 years ..	33,039	986	205	29·8	6·20
„ 25 „ 30 „ ..	23,682	279	62	11·8	2·62
„ 30 „ 35 „ ..	7,193	41	11	5·7	1·53
„ 35 „ 40 „ ..	1,949	7	2	3·6	1·03
„ 40 and upwards ..	418	1	1	2·4	2·39
Not stated	1,125	3	—	2·7	—
Total ..	69,613	1,366	291	19·6	4·18

Length of Service in India.	Average Strength.	Admissions.	Deaths.	Ratios per 1,000 of Strength.	
				Admissions.	Deaths.
Under 1 year	19,061	738	148	38·7	7·76
1 to 2 years	10,616	265	55	25·0	5·18
2 „ 3 „	8,298	87	19	10·5	2·29
3 „ 4 „	6,576	35	10	5·3	1·52
4 „ 5 „	8,246	80	17	9·7	2·06
5 „ 10 „	12,279	141	38	11·5	3·09
10 years and upwards ..	3,412	17	4	5·0	1·17
Not stated	1,125	3	—	2·7	—
Total ..	69,613	1,366	291	19·6	4·18

dia. *Age.*—As in former years, the largest admission rate occurred among men between 20 and 25 years of age, but the ratio in 1903, 29·8 per 1,000, was higher than in 1902 by 1·8, higher than in 1901 by 11·2, and higher than in 1900 by 6·7. This increased admission rate for what may be called the period of special enteric prevalence is unsatisfactory. Compared with the preceding year there are also increased admission ratios of 11·5 in the under 20 years' period, of ·8 in the 25 to 30 years' period, of ·7 in the 30 to 35 years' period, but a decrease in the admission ratio of ·5 for the 35 to 40 years' period, and of 2·8 in the men of 40 years of age and upwards. The highest mortality ratio was 6·20 per 1,000 amongst men between 20 and 25 years of age, followed by 4·53 for the under 20 years' group, 2·62 among men of 25 to 30 years, 2·39 for men of 40 years and upwards, 1·53 among those between 30 and 35 years of age, and 1·03 for men between 35 and 40 years of age. In order of groups just given the mortality rates in 1902 were 6·80, 1·69, 3·29, *nil*, 1·51 and 2·33 respectively.

Service.—The highest admission ratio, 38·7 per 1,000, occurred, as in preceding years, among men of under one year's service in India; it is, however, a decrease of 11·7 on last year's rate, but ·9 above the corresponding ratio for 1901. The next highest admission rate was 25·0 for men in their second year in India, a decrease of ·5 as compared with the preceding year. This is followed by a ratio of 11·5 for men in the five to ten years' period, 10·5 among men in their third year, 9·7 among men in their fifth year, 5·3 among men in their fourth year, and 5·0 for men of over ten years' service; all these ratios except the under one, second and and fourth year periods, are higher than those in 1902. The comparative ratios are as follows:—third year increase of 4·5, fourth year decrease of 8·4, fifth year increase of ·6, five to ten years' increase of 2·6, and for men of ten years' Indian service and upwards increase of 1·5.

The mortality ratio was highest, 7·76 per 1,000, among men in their first year of Indian service, as compared with a death rate of 13·09 for the corresponding group last year. The mortality rate for men in their second year's service in the country was 5·18 against 5·18 in 1902. The other mortality ratios were 2·29 among men in their third year, 1·52 among men in their fourth year, 2·06 among men in their fifth year, 3·09 among men who had served between five and ten years, and 1·17 among men of over ten years' Indian service. These mortality rates, as compared with those for 1902, are higher in the "2 to 3 years'" period ·98, and "5 to 10 years'" ·17, and lower in the "under 1 year" period 5·33, "3 to 4 years'" 1·61, "4 to 5 years'" ·66, and "over 10 years'" ·29. The "1 to 2 years'" period showed no variation.

The admission ratio for the year was 19·6 per 1,000, an increase of 2·9 compared with the preceding year, and a decrease of 2·9 on the decennial average, while the mortality ratio was 4·19 per 1,000 against 4·29 in 1902 and 5·94, the preceding ten years' rate.

The causation of such an increase in the number of admissions for enteric fever occurring as they do for the most part in young soldiers during their first year's service in India must again be attributed to the arrival in the Command of large drafts and reliefs. Many of the men also who arrived from South Africa had been under the conditions of continuous field service for two or more years, and were no doubt most susceptible to any source of infection. The special predisposition of the young soldier to contract enteric fever during his first year of service in India, requires no comment, it has been noted in every report of the Army Medical Department since 1872. The increase in the number of men of the most susceptible age will account for an increase in the actual number of admissions, and the more the cases, the greater the probability of further infection; this was brought to notice in the report for the year 1902, and is still further borne out by the reports for 1903. In 1901 there was a great diminution in the number of men of the susceptible age, and a retention in this country of mature and seasoned soldiers and time-expired men; this was during war pressure, and consequently the prevalence of enteric fever was much reduced, and the admission ratio of men in all the different age periods showed a decrease accordingly; this was especially noticeable among men under 25 years of age. In 1902 *and in 1903*, on the other hand, we had, owing to drafts and reliefs, a large

number of men in India for their first year's service, and naturally there is still a high admission ratio of 38·7 per 1,000 as compared with 50·4 per 1,000 in 1902, and 37·8 per 1,000 in 1901, and 30·4 in 1900. For the same reason we have a high admission ratio in the men between 20 and 25 years, it being 29·8 per 1,000 as contrasted with 28·0 per 1,000 in 1902, and 18·6 in 1901; men of this age period for the most part coming from Home or South Africa. *India.*

It is matter for regret to have to report that enteric fever amongst British troops serving in India has somewhat increased, though the mortality was less, during the year 1903, there being 1,366 cases with 292 deaths (including an invalid), as compared with 1,012 cases with 260 deaths in 1902. To what can this increase be attributed? At most stations, definite and well substantiated reasons have been given for it; at a few it is stated that no cause for the disease could be discovered. On first sight this appears a confession of incompetence or indifference on the part of the local medical authorities, but those who have served in India, who know the careless, happy-go-lucky demeanour of very many British officers and soldiers towards questions of hygiene, personal and general, and who have experienced the ignorance and disregard of the native for the most ordinary sanitation, will quite understand how difficult it often is to lay one's finger on the factor which caused the first appearance of the disease in a station. During the last three years the sanitary condition of British troops in India has been greatly improved. Barracks are now but rarely overcrowded. The ration has been improved and more care is paid to its preparation, while soldier cooks are employed in many regiments, and will shortly be in all, during the cold season and when stationed in the hills. In a new plan of barracks a central company dining hall has been sanctioned, in which cupboards will be provided for the storage of the few delicacies which the soldier has at present to keep in his kit box. More attention is paid to the cleanliness of the cooks, kitchens, and utensils, and to the protection of food from the risk of pollution by flies and dust. A still greater improvement will, it is hoped, be experienced when the new kitchens have been built and a proper cooking stove and separate scullery with sink have been provided.

The drinking water is boiled at nearly all stations, a Larymore boiler being used for the purpose in many cantonments, and large cauldrons in others. At most stations where the supply is from wells, they have been covered in, and have had pumps attached to them. In Burma, artesian wells will shortly provide a pure and abundant supply of water to the two largest garrisons. At some stations the water undergoes sand filtration, and at a great number pipes carry and distribute the water to barracks. Government dairy farms have been established at a good number of stations, and at others there are regimental dairies. The regimental aerated water factories are carefully worked, and the water is almost invariably boiled before it is carbonated. In fact, the aerated waters from these factories are probably the best, purest, and safest that can be procured in India. Better arrangements for bathing will, it is hoped, be gradually introduced into all stations, the shower bath system, with arrangements for heating the water, having given every satisfaction at those stations where it has been tried. A new type of swimming bath with shower baths attached, is under consideration and will, if sanctioned, prove more cleanly than those at present in use. Steam laundries have proved very satisfactory, and will, no doubt, be gradually introduced to all stations. Urine troughs have been introduced in place of the pans, and trials are being made with latrines of lighter construction and provided with impermeable floors, automatically closing lids to the seats, and fly-proof screens for the pans. The conservancy system in vogue is still the dry earth one, and all excreta are disposed of in trenches (Allahabad system) at a distance of a mile or more from cantonments. Refuse, litter, and manure are removed every day, and disposed of to the native agriculturists, or destroyed by burning.

On first sight, the sanitary arrangements appear satisfactory, and without doubt are better than those of most civil stations, but it will be shown that all the avenues for the entrance of infectious disease have not yet been closed. In Indian cantonments, British troops are exposed to certain conditions which most probably have the power of reducing the natural

dia. immunity of the individual by lowering, for a shorter or longer period, his vital resistance, and so predisposing his system to the invasion of the typhoid germ, should he meet with it when in this negative stage. These adverse influences are :—

(*a*) *Foul air and neglect of attention to ventilation of barrack rooms.*—The first is not now frequently experienced in cantonments, but the second, unfortunately, is. The dislike that most British soldiers have to the entrance of fresh air to their sleeping rooms is remarkable, though not a matter to be surprised at, since the class from which they are chiefly drawn exhibit the same repugnance to ventilation. Even in the hot weather this fact is noticeable, while in the cold season the atmosphere of the barrack room in the morning is generally most objectionable. When troops are under canvas, overcrowding and neglect of ventilation of tents is still more evident.

(*b*) *In attention to personal cleanliness.*—This can rarely be gross, for the rules of the service would not permit of it. Still, it is on many occasions very noticeable, especially during cold weather, when, however, there is an excuse for the soldier, as he cannot always obtain hot water to wash or bathe with. This difficulty will, it is hoped, be soon removed.

(*c*) *Fatigue.*—The effect of this in increasing the susceptibility to disease amongst young soldiers cannot be doubted, especially in the case of recent arrivals in India, perhaps, as is believed by some, because over-exertion reduces the bactericidal power of the blood. The influence of this predisposing factor will probably be more felt in connection with those cases of enteric fever that are met with during the cold weather in India, which is the recognised season for drills and manœuvres.

(*d*) *Exposure to sun.*—There is little doubt that undue exposure to a tropical sun reduces the vital resisting power of the system against disease. During the two or three months prior to the break of the rains, musketry and riding schools are usually gone through in the early morning when the sun is very hot, though it has not the fierceness of mid-day. It is not at all uncommon for men who report sick during that season to attribute their attack of enteric to the heat of the sun when on the range or in the manège.

(*e*) *Soil pollution.*—This occurs in barracks in and about urinals and latrines, in the vicinity of barrack rooms, canteens, and regimental institutes, about which the men micturate indiscriminately after nightfall, and in the standings for cavalry and transport animals. In camp, soil pollution will be still greater unless conservancy is strictly attended to, and its evil effects will be sooner realised owing to the crowded state of all camps. Besides the effect that areas of soil, polluted and offensive with human and animal excreta, have on the general health of those living in their vicinity, these areas may also become centres for the origin and spread of enteric should they by any chance be infected by typhoid excreta or urine. The specific bacillus finds a soil all ready for its growth and life, and infected material may be conveyed from the polluted areas on the boots of the men, by flies and in dust, and so give rise to infection of barrack rooms, tents, human beings, food and drink.

Lastly (*f*) The too common neglect by both officers and men to take some tea and a little light food before proceeding to their duties in the early morning, when the stomach is empty after a long fast, nervous and muscular energy is diminished and the body perhaps still fatigued after a hot, restless, and more or less sleepless night, is a powerful factor in assisting the increase of the susceptibility of the system to invasion by the typhoid germ. Errors in eating and drinking, by producing a state of catarrh of the stomach, will also contribute towards this condition of reduced natural immunity.

Instructions have been issued to all British troops in India explaining the reasons for the necessity of taking measures to prevent the occurrence of the above-mentioned predisposing causes of enteric fever. *India.*

The infection of British troops in Indian cantonments by the enteric bacillus can generally be attributed to the agency of infected food, drink, clothing, flies and dust.

Food.—The following are the usual ways that pollution is caused. To become a carrying agent of infection food has first to be infected by the specific bacillus. In the case of food that has been properly cooked and is served hot, there can be very little danger of infection. It is otherwise with food that is taken uncooked or cold. Those of this class that are open to grave suspicion are milk, butter, fruit, raw vegetables and cold puddings such as rice, sago or cream. Though the institution of government and regimental dairies has no doubt afforded considerable protection to the milk and butter supply of barracks, still their output is often not yet sufficient to meet all the demands of the regiments and hospitals in cantonments, and supplies have necessarily to be obtained from outside native sources.

Both milk and butter are easily contaminated by dirty vessels, dirty cloths, flies—to which they are most attractive, and dust, and both are also excellent culture media for many forms of pathogenic micro-organisms, including the enteric bacillus. For these reasons it is absolutely necessary that all milk whether intended for use by itself or for the production of cream and butter should be carefully sterilised, carried in clean, covered vessels and stored in the same in wire safes. Butter and cream should be similarly protected. The milk procured from native dairymen should invariably be strained and boiled and their butter should be avoided. Fruit may be the means of carrying infection, if eaten unwashed as obtained from the fruit stall or hawker. In both stalls and baskets it is open to pollution by flies and dust, and the seller often strives to freshen his goods by sprinkling them with water taken from the nearest "gurrah" (water vessel) or puddle, the latter having perhaps been used for ablution purposes.

Raw Vegetables.—The native market gardener constantly uses human excreta as manure and also applies it in a liquid state to growing plants. It is quite possible for vegetables such as celery, lettuce, radishes, and water-cress which are much appreciated by the men and frequently eaten uncooked after a very perfunctory washing, to be the carriers of infective material when grown under such conditions. Further, the gardeners may be seen any day washing their vegetables in ditches and ponds just outside cantonments before they offer them for sale in the bazar. The water used is always more or less dirty, frequently fouled with human and animal excreta and must be a source of danger.

Cold Puddings.—A few years ago, an outbreak of enteric that occurred in an officers' mess was traced to an infected cold cream pudding, and it is quite possible that dishes of milk, cream, rice &c., which are commonly served in native restaurants and railway refreshment rooms, can easily be infected by flies and dust, since they are rarely protected by any kind of covering.

Though there certainly is a risk of food in regimental cookhouses being infected through some carelessness on the part of native cooks when European supervision is not strictly carried out, still, far more danger of infection is connected with food obtained at railway refreshment rooms, in bazar eating-houses, and from native hawkers.

Water.—At only two stations was the water supply laid under suspicion of having caused enteric in cantonments. As drinking water is recommended to be boiled in all barracks occupied by British troops, it would naturally be assumed that the risk of infection by water was a small one. It is probably not very great, except when men drink water obtained in the bazar, or from streams, wells, and ponds outside cantonments. Still there is risk that water may become polluted after it has been sterilised, either during conveyance from the boiler to the storage tank or while stored in the tanks and water vessels. When *Larrymore* boilers are used the water is drawn

India.

through the tap into zinc buckets, but when cauldrons are used the water is often removed by dipping the buckets into them, and pollution may occur in the process. The buckets are supposed to be used for this purpose alone, and when not in use are ordered to be kept hung up, but neglect of these precautions is not uncommon. The covers of the storage receptacles are not always kept locked, and the men frequently obtain water when they want it by dipping a mug into the tank. The earthenware vessels intended for holding and cooling the drinking water are seldom kept covered, are difficult to clean, and their contents are easily polluted by dust. Instances have been reported of raw water being added to the sterile water owing to laxity of supervision on the part of regimental authorities.

Clothing.—One case is reported this year of a man acquiring infection through using a quilt which had covered a sufferer from enteric. It is quite possible for underclothing soiled with the excretions of a case of ambulant typhoid to get mixed with the general wash during the period the man continues in barracks before reporting sick. The washermen are likely to be infected in such instances, but as regimental laundry work is usually performed in a very careless manner, the soiled clothing being often not boiled because the native washerman wants to save the cost of fuel, it is possible that other clothing may be infected. Kitchen cloths when washed in the manner they often are at present may become carriers of infection. Being small articles the washerman frequently washes them in any pond, no matter how dirty it may be. After this imperfect cleaning they are returned to the cook, who uses them to wipe plates, cover articles of food, and even to strain soup or milk. If by any chance they have become infected, it is quite possible for them to infect food.

Flies and Dust.—The greater number of cases of enteric that have occurred amongst British troops in India during the present year are attributed to flies and dust acting as carriers of infectious matters from latrines, urinals, and trenching grounds. It has been proved over and over again that flies carry away fæcal matter on their legs when they have visited or fed on excreta. Such flies have been caught in regimental cookhouses and the *Bacillus coli communis* isolated from them, though so far the *Bacillus typhi abdominalis* has not been obtained. It only requires the presence of typhoid excreta or urine in barracks to make flies agents for the conveyance of infection to food and human beings. No one who has been in India can doubt that at times excretions containing the enteric bacillus are deposited in the barrack latrines and urinals, for it is well known that ambulant cases are not uncommon amongst British troops, and also that men infected with the disease often, for some reason or other, keep out of hospital as long as they possibly can. The latter class may escape detection at one or two medical inspections, especially when they are employed as clerks or in messes of officers and non-commissioned officers. Here we have an ample supply of infectious material which is not in the slightest degree rendered less dangerous by the conservancy system in vogue. Experience is daily proving that the method of treating excreta with dry earth and removing it in receptacles or carts for disposal in trenches is not only offensive and unsuitable, but is also fraught with very real danger to the health of troops. The latrines are cumbrous structures with earthen floors, and in not a few instances have been erected within ten yards of a cookhouse. The seats are unprovided with covers, the pans are not protected from the ingress of flies, often do not fit sufficiently closely to the seat, and so pollution of the ground with urine is frequently unavoidable. Dry earth is not usually immediately applied to the dejecta by the men, and the pans frequently remain for some time unemptied by the sweepers. Soiling of the ground behind the latrine is not infrequent when the pans are being emptied into receptacles, and is almost unavoidable when the latter are being emptied into the filth carts. At the urinals, pollution of the earthen floor under the trough is common, and so is pollution of the ground outside the shelters when the urine receptacles are being emptied into the filth carts. We have now certain areas of ground, in and about latrines and urinals in barracks which are always more or less polluted with possibly *infected* excreta, not to mention the pollution of the soil that occurs in the

neighbourhood of barrack rooms, regimental institutes, and canteens as a result of indiscriminate micturition by the men. Since it has been proved that the enteric bacillus can be recovered from Indian dust five days after it was infected, and from the same after three days when it had been exposed for nearly twenty-four hours to the rays of a tropical sun, it is quite evident what danger spots these polluted areas may prove when the blasts and whirls of the wind raise and carry away the infected upper layers of dust and deposit it on uncovered articles of food, or even in the throats of human beings. But the risk of infection through this system of conservancy does not stop at the barracks. As the filth and receptacle carts rock along the roads some of their contents very frequently shake out, soiling both cart and ground. Efficient disinfection of the filth receptacles is not carried out at the trenches, and they are often returned to cantonments in almost as dangerous a condition as when they left it. The filth carts can be neither properly emptied nor cleaned, and they always carry back with them swarms of fæcal-fed flies that forthwith proceed to distribute themselves about the barracks and officers' bungalows. *India.*

The present method of disposal of excreta is also objectionable and insanitary. At some stations what is known as the Allahabad shallow trench system is in vogue. In this, the top soil is scraped off a rectangular space (16 feet by 5 feet) for a depth of three inches, and the bottom soil is loosened for another 6 inches. Into this space the contents (60 gallons) of a filth cart are tipped, spread evenly over its bottom, and then covered with the earth that had been removed. Heavy rain often washes the contents of these shallow trenches on to the surrounding ground. The tropical sun dries the covering of earth to the consistency of dust, and the wind and flies carry the possibly infected excretal matters far and wide. No more dangerous system of disposal could be adopted in the vicinity of a cantonment, though it certainly works well on sites far removed from all habitations. In some stations, however, excreta is disposed of in trenches one foot wide and nine inches deep, being deposited along the bottom to a depth of three inches, and then covered in with earth. With this method the excreta is less likely to be exposed by rain and wind, but the trenches are still too shallow. Urine is deposited in separate trenches, about six inches deep. At any trenching ground dogs, kites and crows may be observed scratching up the newly-buried ordure, in search of chance pieces of food, and the excretal matter thus exposed remains uncovered to dry and be converted into dust, or carried away on the feet of flies. It is evident that shallow trenching affords every assistance to the spread of infectious disease. After a certain period, one to three months, at a suitable season, the trenched ground is supposed to be cropped, but this is not always done.

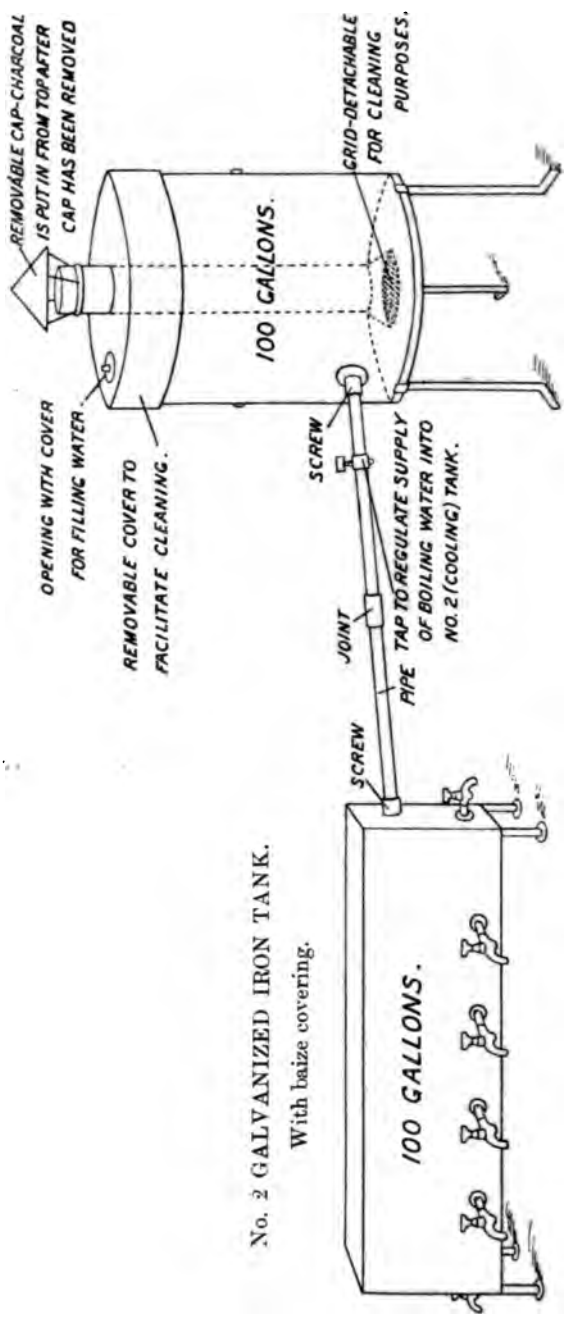
As was stated in the preceding remarks, a great deal has been done, and more is being done, to protect the British soldier as much as possible against the infection of enteric fever. It now remains to consider what further measures can be suggested in this direction.

Food.—The construction of kitchens on the plan recently sanctioned should be pressed on, since the present ones are dark, badly paved and badly sited. It is intended to erect the new kitchens on the opposite side of barracks to that on which the latrines and urinals are placed, and there will then be a space of nearly one hundred yards between these outhouses. This should materially lessen the visits of flies to the kitchen. All milk intended for the use of British troops should, after sterilisation, be stored in clean, locked cans, provided with a tap, through which it should alone be drawn. No butter should be allowed into barracks that has not been made from sterilised milk. The cleanly removal of cookhouse sullage water is a matter of considerable difficulty in a place where a water-borne sewage system cannot be installed. The matter is having careful attention, for the greasy slops are most attractive to flies. The total exclusion of flies from Indian cookhouses is probably impossible, but their numbers can be kept down if proper attention is paid by the regimental authorities to the instructions which have been issued on this point. Bazar eating-houses should be placed out of bounds, *or carefully supervised* and inspected by the regimental

India.

No. 1 GALVANIZED IRON TANK.

On the plan of the ordinary hot-water apparatus.


REMOVABLE CAP-CHARCOAL IS PUT IN FROM TOP AFTER CAP HAS BEEN REMOVED
OPENING WITH COVER FOR FILLING WATER
REMOVABLE COVER TO FACILITATE CLEANING.
100 GALLONS.
GRID-DETACHABLE FOR CLEANING PURPOSES.
SCREW
JOINT
PIPE
TAP TO REGULATE SUPPLY OF BOILING WATER INTO NO. 2 (COOLING) TANK.
SCREW
100 GALLONS.

No. 2 GALVANIZED IRON TANK.

With baize covering.

authorities, and all hawkers of food and drink should be excluded from barracks. *India.*

Water.—The drinking water in Indian cantonments will probably always require to be boiled unless some efficient form of mechanical filtration on the Jewell system or chemical sterilisation by the Ferrochlor method is introduced. Even then there may be risk of pollution during distribution, for the native water establishment will still remain. At present the sterile water is open to pollution during conveyance from the boiler to the storage tank and during storage in the tanks and drinking water vessels. It would be far safer if the water was drawn as required from the vessel in which it had been boiled. This could easily be managed by using an apparatus similar to that for heating bath water. The boilers should be placed in the verandahs of barracks and must be provided with a locked cover and tap. Two such boilers would be required for a company and they should be connected by a pipe, capable of being closed by a valve, with a tank having a capacity of 50–100 gallons, from which the sterile water must be drawn through taps by the men. The temperature of the boiling water should be tested with a thermometer by a European, to ensure its having reached the boiling point. All the earthenware vessels at present supplied should be abolished, and cooling of water effected by covering the sterile water tank with a felt jacket, which should be kept wet with cold water.

Laundry.—When it is remembered how careless, inefficient and dirty are the methods of the native washerman, it becomes evident how important it is that a laundry, provided with a proper apparatus in which all soiled clothing could be steamed or boiled before being washed, should be constructed at every station. Trials have been made at two stations of experimental laundries on this plan and the results have been most satisfactory.

Conservancy.—This is the most important sanitary matter connected with the health of British troops in Indian cantonments. Evidence is being brought forward daily in support of the opinion that the bearing which a badly conducted conservancy system has on the causation and spread of enteric fever amongst British troops, is of far greater importance than the risk of infection through food and drink. The malign influence of defective methods of conservancy is ably supported by its allies, flies and dust.

To diminish, if not to remove, the danger to which the health of British troops is daily exposed in almost every station in India at the present day, it is an imperative necessity that the strictest supervision should be observed in the sanitary details connected with the removal and disposal of refuse and excreta, both solid and liquid, from British regimental lines and the prevention of soil pollution in the barrack area. Refuse should never be permitted to lie about, or in, the vicinity of barracks longer than possible. The light rubbish should be collected several times a day and placed in dust bins till it can be removed by covered dust carts. Manure and soiled litter should be frequently swept from the standings and stables of cavalry and transport animals and stacked in a masonry enclosure with a cemented floor. As soon as possible it should be removed, for if left it forms a most attractive place for flies to visit and lay their eggs in and the young swarms will add to the number of carriers of infection in barracks. If litter and manure is intended to be used for agricultural purposes, it should nevertheless be taken away from the vicinity of barracks, placed on some site properly constructed for its reception and kept covered with a layer of earth to prevent the visits of flies. When refuse is disposed of by being burned in the open as at present, the operation is slow and almost always causes more or less offence to the neighbourhood, even for some distance, should the wind blow from the burning ground. For these reasons it is advisable that every large cantonment should be provided with some form of refuse destructor, either a Horsfall's movable incinerator which can destroy 4½ tons of refuse in a day, or the Conley camp crematory used by the American army, which weighs less than half a ton and can destroy the refuse and garbage of a brigade of troops in a very short time. The pollution of the ground near certain barrack buildings, which results from the indiscriminate manner in which the men micturate on it, should be strictly forbidden, and if necessary more movable urinals should be provided near the regimental institute.

India.

It is, however, the system of removal and disposal of the excreta of British troops that so urgently requires to be reformed. The defects of the present method have been explained and there can be no doubt that every step in its operation is accompanied with nuisance, soil pollution and danger to health. The whole question of the removal and disposal of excreta from military cantonments in India is fraught with great difficulty. The differences in climate, surface configuration, soil formation, water supply and size of stations that are met with throughout the continent make it impossible to lay down one system as suitable for all cantonments at all seasons of the year. For instance, at certain large stations the surface gradients and water supply may allow of the successful installation of a water-carriage system of sewage, which, owing to the expense that would have to be incurred, would be an unjustifiable measure to introduce to a small station, even though it possessed equal natural advantages. Again, the disposal of excreta by trenching may be efficiently carried out at some stations during the dry season, where in the rains it is impossible, owing to the waterlogged condition of the soil, and will only result in the formation of a pestilent morass with the causation of nuisance and danger to health. Lastly, at some small hill stations and at others in Lower India the trenching of excreta is always impossible. At the former a sufficient area of land suitable for the purpose cannot be obtained near cantonments and all removal must be done by hand. At the latter the constant high level of the ground water renders the method inapplicable and converts it into a nuisance and a danger to health and water supplies. At those large stations, where no difficulties are met in connection with gradients and water supply and where the size of the garrison justifies a large expenditure of money, the introduction of a water-carriage system with final bacteriolytic and land treatment of all sewage, is without doubt the best sanitary measure that can be adopted. At stations with a constant high level of ground soil water and whose size would not justify the introduction of a water-carriage system, the excreta should be removed after sterilisation and passed through a septic tank and filters, the filtrate being applied to land. At small stations in the hills which labour under the disadvantages described above, incineration would best meet the requirements. It may be taken for granted that for some years to come many Indian cantonments will have to continue employing a removal system of conservancy with disposal of the excreta by burial. But it is most imperative that the excreta should be rendered innocuous as early as possible and that the operation of the system should be so modified and improved that the nuisance and danger connected with it under the present method of working will be reduced to a minimum. It is suggested that the desired result may be attained if some such measures as the following are adopted. The present pattern of latrines should be abolished and replaced by others constructed of corrugated iron and containing as little wood as possible in their structure. These should be well ventilated, ought not admit too much light, and their floors must be made of some impermeable material. The seats should be removable and provided with an automatically closing cover, the space underneath them for the pans being enclosed by panels of gauze wire netting to exclude flies. The pans should be of iron, provided with tight-fitting covers and narrower at the bottom than at the top but large enough to allow a latrine with 8 seats, the accommodation allotted to a company, holding, without the necessity for removal, all the solid dejecta of one day from that number of men. The size of the pan need not be great, since 25 lbs. represents the weight of fæcal matter excreted by 100 men in 24 hours. The use of dry earth in latrines should be discontinued, and in its place some chemical solution should be poured into the pan to deodorise and disinfect the excreta and to keep away flies. The disinfectant chos-n should preferably be non-poisonous and probably the most suitable would be solutions of freshly slaked lime (1 part to 8 of water), creolin (1 in 150), and izal (1 in 100). The first is cheap and easily procurable all over India. The other two are both reliable disinfectants but considerably more expensive than lime. Two and a half pints of one of these solutions should be poured into each pan early every morning. The pans must be replaced at night by clean ones,

and their covers fastened with thumb screws. They must to be taken on a cart straight to the trenching ground for the disposal of their contents, and must be thoroughly disinfected before they are returned to cantonments. By this method spillage of the excreta is prevented, flies will be kept away, the use of filth carts and latrine receptacles can be discontinued, and soil pollution, which is almost a certainty at present when the pans are being emptied into the receptacles and the latter into the carts, will be obviated. Latrine seats should be scrubbed daily with a warm solution of washing soda, and the floors of latrines and urinals must be swabbed clean every morning. The urinals should be in a compartment of the latrine or in a small separate structure of corrugated iron, but in either case their floors must be of impermeable material. The urine trough should be wiped several times a day with a mop or cloth soaked with kerosine oil, to remove any urinous odour, and it should empty into a covered receptacle by a pipe passing through an opening in its lid. Each urine receptacle should have a gallon of disinfecting solution poured into it every morning; it must be replaced during the night by a clean one, and removed direct to the trenching ground for the disposal of its contents. While being removed a close-fitting cover, fastened with screws, should replace the one perforated for the urinal waste pipe. The sterilisation of solid excreta by means of chemical disinfecting solutions cannot be assured unless they are well broken up and mixed with the disinfectant. For this purpose the sweeper should be provided with a small iron paddle, which must be kept standing, when not in use, in a vessel containing some disinfectant. The sterilised excreta can safely be disposed of by burial in trenches 3 feet deep and 3 feet wide, which must be filled in when their contents are within a foot of the surface. Treatment by septic tank and percolation filters, with subsequent application of the effluent to land, might also be adopted for the disposal of sterilised excreta, though it is difficult to say what manurial value the fluid would possess. Major Weir, R.A.M.C., late Sanitary Officer, Punjab Command, has suggested a method in which a deodorant is used in the latrine pans, which are removed each day to a central depôt, where their contents are emptied into a tank and sterilised by steam. The resulting material is disposed of by burial or distribution over land, and the pans are disinfected by steam at the depôt before being returned to cantonments.

The system of disposing of excreta in shallow trenches should be abandoned in the vicinity of cantonments, and when such a method of disposal is adopted, the trenches should not be less than 3 or 4 feet deep. The site for a trenching ground should be carefully selected both with respect to the nature of the soil and its position in reference to cantonments. The ground should not drain towards any water-course, nor should it be on a site likely to be flooded or to hold water during the monsoon, and the roads leading to it should be well made and kept in good repair. At the proper time and season the trenching ground should be ploughed and sown with coarse, rapid-growing crops, such as "bajra," "jawari" and jute. When the configuration or formation of the soil will not admit of proper trenching with subsequent cultivation, the excreta should be dealt with by septic tanks and filters, the effluent being applied to land. Ample means should be provided at the trenching ground for the disinfection of the receptacles.

Whatever conservancy method is adopted, there is no doubt that the present one should be abolished, since it is a standing and increasing menace to the health of British troops in India.

All these sanitary reforms will require educated European supervision and the expenditure of money, but the cost will be less than that entailed by the deaths of 219 young soldiers, estimated as equal to a sum of about £22,000 sterling, and the loss to the Army of the services of nearly 1,200 others for a period of six to 12 months, which was the bill of costs resulting from enteric fever in India in 1903.

The admission ratio per mille of officers for enteric fever was higher than that of the non-commissioned officers and men. It might be thought that officers were less exposed to the risk of infection than the men, but this is not so. In officers' messes of many British regiments, very little attention is ordinarily paid to carefulness in the preparation of food, to the boiling

India.

of water and milk, to the cleanliness of cooks, utensils, safes and cloths, or to the sanitation of the kitchen and its environs. The young officer is often exceedingly careless with respect to the water, milk and butter he uses in his bungalow, and on more than one occasion it has been recorded that his early breakfast has been brought to him by a servant of the lowest caste, while he pays very little attention to the sanitary condition of his compound and out-buildings. His trips into the district after sport may also expose him to the temptation of drinking unapproved water when hot and thirsty. As a matter of fact, the young officer is propably more frequently exposed to the risk of enteric infection than the non-commissioned officer or private soldier, for he is not so carefully looked after in his mess and bungalow.

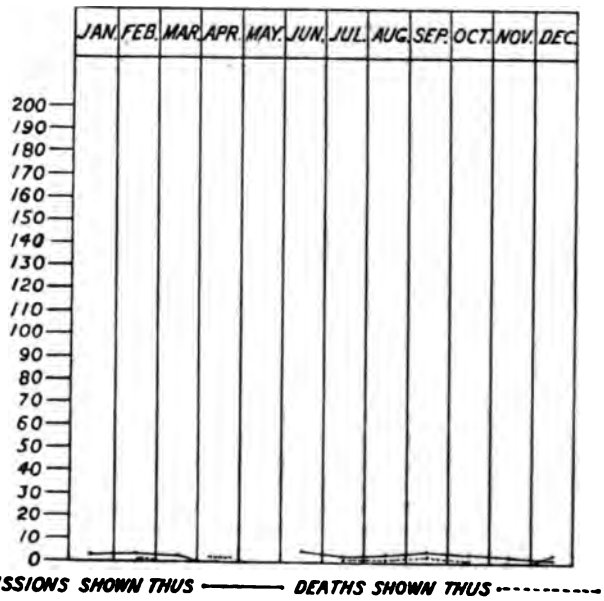
It is sincerely to be hoped that when the proposed re-distribution of British troops along the frontier is carried out, that proper measures will be taken to ensure the introduction of a pure water supply, and the installation of an efficient and safe conservancy system at each cantonment, so that the errors of the past and present time may not be handed on to the future.

Note on seasonal prevalence of enteric fever charts.—Enteric fever cases amongst troops engaged at the Delhi Durbar and manœuvres, and amongst troops on the line of march, have been excluded from Command figures, with a view to make the figures shown in those charts agree with the Command totals shown in the tables given in the body of the report, and also because in 1903 all the enteric cases amongst troops on the line of march could not be taken into account owing to the exclusion of some marching returns, which were received too late for inclusion in the general return.

SEASONAL PREVALENCE OF ENTERIC FEVER IN INDIA DURING 1903.

Burma District.

Average Strength, 3,538.



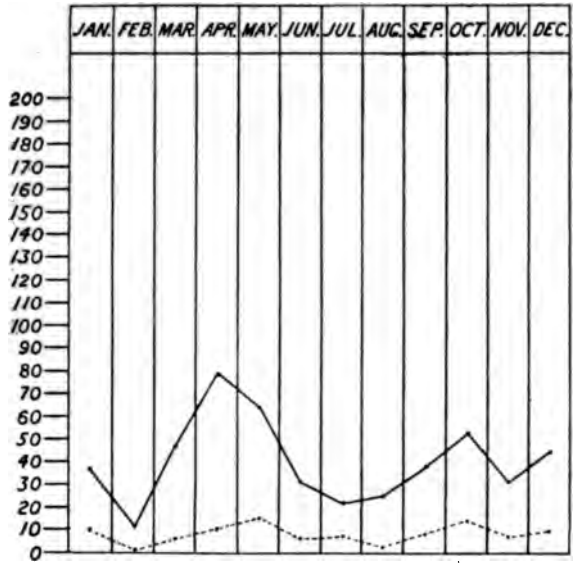
ADMISSIONS SHOWN THUS ——— DEATHS SHOWN THUS ----------

ADMISSIONS	2	3	2	–	–	4	2	3	5	3	2	1	= 27
DEATHS	–	1	–	1	–	–	1	1	3	1	–	3	= 11

SEASONAL PREVALENCE OF ENTERIC FEVER IN INDIA DURING 1903.

Bengal Command.

Average Strength, 21,146.

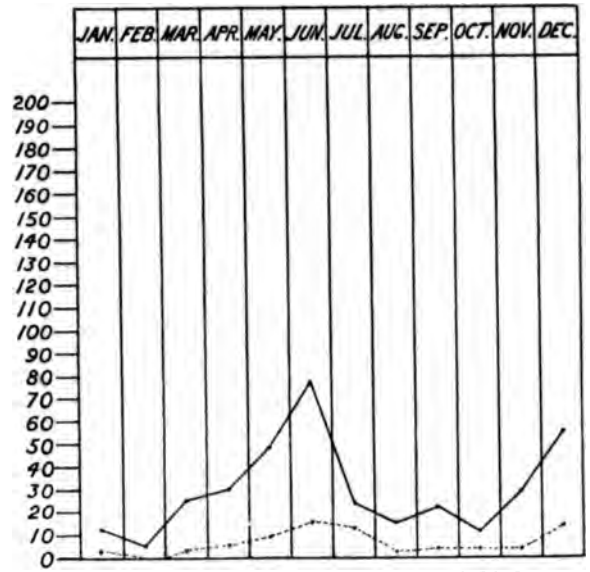


ADMISSIONS SHOWN THUS ——— DEATHS SHOWN THUS ·····

ADMISSIONS	37	11	47	79	64	31	22	25	38	52	31	45	= 482
DEATHS	10	1	6	10	15	6	7	2	8	14	7	10	= 96

Punjab Command.

Average Strength, 17,352

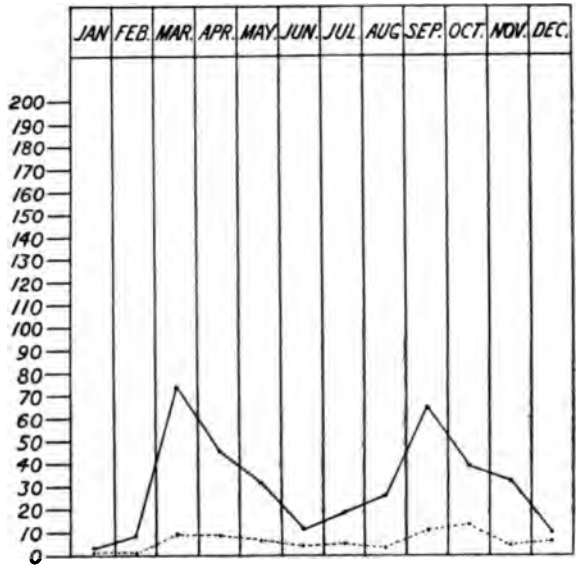


ADMISSIONS SHOWN THUS ——— DEATHS SHOWN THUS ·····

ADMISSIONS	12	6	26	30	48	77	24	15	22	11	28	55	= 354
DEATHS	4	–	3	6	9	16	13	2	4	4	4	14	= 79

SEASONAL PREVALENCE OF ENTERIC FEVER IN INDIA DURING 1903.

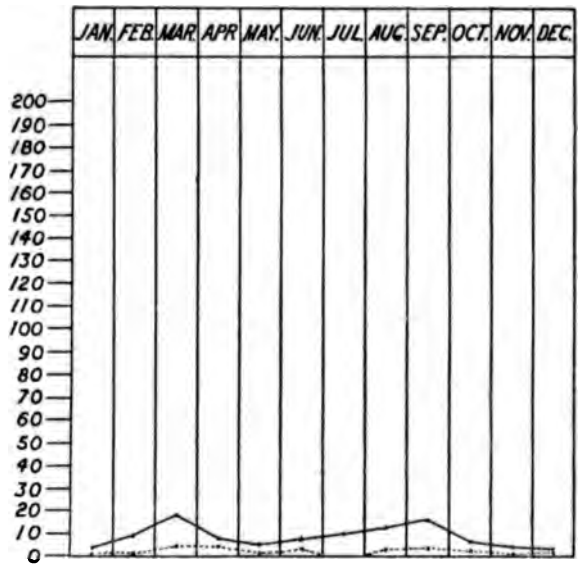
BOMBAY COMMAND.
Average Strength, 15,846.



ADMISSIONS SHOWN THUS ——— DEATHS SHOWN THUS ·····

ADMISSIONS	3	9	74	46	32	12	19	27	65	39	33	10	= 369
DEATHS	1	1	9	9	7	4	5	3	11	14	4	6	= 74

MADRAS COMMAND
Average Strength, 9,337.

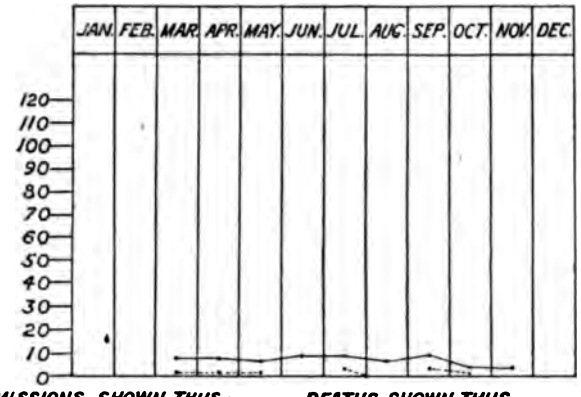


ADMISSIONS SHOWN THUS ——— DEATHS SHOWN THUS ·····

ADMISSIONS	3	9	18	8	5	8	10	13	17	7	5	3	= 106
DEATHS	1	1	4	4	1	3	–	3	4	2	1	2	= 26

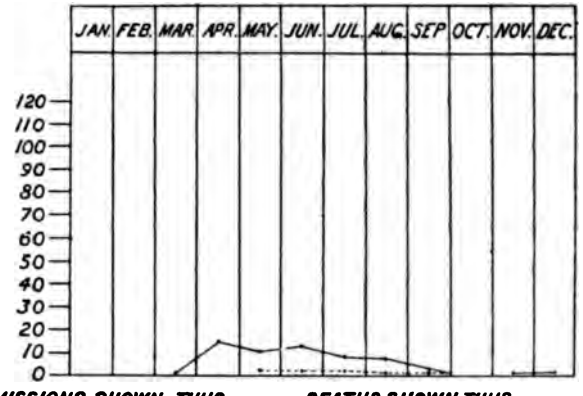
ENTERIC FEVER. ADMISSIONS AND DEATHS AT HILL STATIONS IN 1903.

Bengal Command.



ADMISSIONS	0	0	7	8	6	9	9	6	9	4	3	0 = 61
DEATHS	–	–	1	1	1	–	3	–	3	1	–	– = 10

Punjab Command.



ADMISSIONS	–	–	1	14	10	13	8	7	2	–	1	1 = 57
DEATHS	–	–	–	–	2	2	2	1	1	–	–	– = 8

The largest number of cases of enteric fever in any single station during the year occurred at Umballa, where with an average strength of 2,164 there were 107 admissions, with 21 deaths, as compared with 55 admissions with 9 deaths in 1902, and 24 admissions with 10 deaths in 1901.

The deaths and admissions by months and corps were as follows :—

	12th Lancers.		"D" R.H.A.		"I" R.H.A.		No. 7 M.B. R.G.A.		1st Somerset Light Infy.		1st Dorset Regt.		2nd Welsh Regt.		2nd Black Watch.		1st Oxfordshire Light Infantry.		1st Northampton Regiment.		2nd North Stafford Regiment.		2nd. Gordon Hglrs.		2nd Royal Munster Fusiliers.		Unattached List.		Totals.	
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
January ..	5	1	—	—	—	—	—	—	—	—	1	—	—	—	4	1	—	—	—	—	—	—	—	—	—	—	—	—	10	2
February ..	2	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	4	—
March ..	3	1	2	—	—	—	1	1	—	—	—	—	6	—	8	—	—	—	1	—	—	—	—	—	—	—	—	—	21	2
April ..	8	1	—	1	—	—	—	—	—	—	—	—	—	1	1	3	—	—	—	—	—	—	—	—	—	—	—	—	9	6
May	10	4	—	—	—	—	—	—	—	—	—	—	—	—	4	—	—	—	—	—	—	—	—	—	—	—	—	—	14	4
June ..	7	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	1	—	1	—	—	—	11	1
July	2	2	—	—	—	—	—	—	—	—	1	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	5	2
August ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
September ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
October ..	1	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—
November ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	1	—	—	—	2	—	—	—	—	—	1	—	6	—
December ..	2	—	—	—	—	—	—	—	1	—	—	—	—	—	3	—	6	2	—	—	12	2	—	—	—	—	—	—	24	4
Totals ..	40	10	2	1	2	—	1	1	1	—	2	—	7	1	25	4	7	2	3	—	14	2	1	—	1	—	1	—	107	21

The admission and mortality ratios were 49·4 and 9·70 per 1,000 respectively as compared with 43·2 and 7·06 in 1902, and 19·6 and 18·17 in 1901. An outbreak of enteric fever occurred at Umballa in November, 1902,* and its prevalence from January to the end of July, 1903, was a direct continuation of this epidemic. This outbreak began on the 29th October, 1902, in the case of a man of the 12th Lancers, who was admitted to hospital twenty-one days after landing in India from South Africa. No previous case had occurred among British troops since 2nd June of that year. During November and December, 1902, there were 15 and 13 admissions respectively, and the epidemic continued into the new year. Reference to the above table will explain deaths and admissions for 1903 by months and corps. The units which supplied most of the cases were the 12th Royal Lancers and the 2nd Battalion Royal Highlanders, the former from an average strength of 636 furnishing 40 cases, and the latter with a strength of 820 furnishing 25 cases. No cases occurred among the women and children in garrison. *India.*

In April the Command Sanitary Officer (Major J. C. Weir, R.A.M.C.) was ordered to investigate and report on the epidemic. His report and other matters connected with the origin of the outbreak is fully set forth in the Army Medical Department Report for 1902 (pp. 206 to 209). The epidemic, after dying down in the summer months, recommenced again in early winter, during the last week in October, which was directly after the arrival of the 1st Oxfordshire Light Infantry and the 2nd North Staffordshire Regiment from England. Every endeavour was made locally to trace the source of infection in all cases admitted to hospital, but no satisfactory explanation was offered. The disease has been attributed by the Officer Commanding station hospital to the following causes:—Water, latrine infection, infected clothing and bedding, flies, dust, importation, bazars.

Excluding obviously imported cases, he believes that the disease is constantly being introduced into barracks from the bazars; either actually contracted in the bazars or through the natives and supplies coming from thence, in the same manner as cholera (as we come across it in cantonments nowadays) must be. Acting, however, on the assumption that all the foregoing were contributory causes, the following prophylactic measures were enforced among British troops:—

(*a*) All water boiled (but utensils of distribution were not sterilised), and the men were warned not to replenish their water bottles on field days except from regimental supplies. It may be noted that examinations of the Umballa water supply were made on four different occasions during the year by the Command Sanitary Officer, and that no pollution was found.

(*b*) All the latrines were thoroughly disinfected, the walls scraped, the floors renewed with fresh rammed earth, and new pans supplied. Convalescent enteric fever cases were provided with separate latrine accommodation, and their excreta destroyed by fire.

(*c*) Flies (which are a great pest at Umballa in the fly season) were excluded as far as possible by gauze wired doors.

(*d*) Dust, where possible, was removed.

(*e*) The whole of the clothing and bedding of the station was boiled and all clothing was ordered to be boiled before re-issue from stores.

(*f*) The bazars for the most part of the year were placed out of bounds.

At Meerut there were 100 admissions with 23 deaths for enteric fever, as compared with 43 admissions and 12 deaths in 1902.

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* *Vide* Army Medical Department Report, 1902, pp. 206–209.

India.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	3	—	—	11	13	8	1	1	—	14	19	30
Deaths..	4	—	—	2	2	3	1	1	—	2	4	4

This shows an increased prevalence, the admission ratio being 50·4 and the death rate 11 59 per 1,000, against 31·2 and 8·70 the corresponding rates for the preceding year. Of the 100 cases, 63 occurred during the last three months of the year. The Command Sanitary Officer (Maj. A. R. Aldridge, R.A.M.C.) was sent to Meerut to investigate the epidemic, which is stated to have arisen as follows :—

On 29th September, an officer of the 15th Hussars, who had arrived from Chakrata on the 18th, was attacked, and on 6th October, a man of the same regiment was also attacked. This proved to be the beginning of an epidemic, and by 20th December, 38 cases had occurred in this regiment, and 16 in the remaining British units, each of which had some cases. The average strength of the 15th Hussars was 697, and of the other corps 1,896, so it is evident that the epidemic was chiefly in the former regiment. This special prevalence was not to be accounted for by any increase of susceptible material in the shape of a draft of young soldiers. In the 15th Hussars cases came from all the barrack rooms, and in proportion to the number of men living in each, there was no special prevalence in any. The water supply of the whole cantonment is the filtered municipal supply, from the Ganges Canal. The canal is usually cut off from the river for a few weeks in the autumn, and during this time the water supplied consists of drainage from the land through which the canal runs ; and analyses show a marked deterioration in purity as compared with the rest of the year. During the present year, however, although the canal was closed from 23rd July to 25th September and from 10th to 16th October, there was some leakage from the river, and the volume of water in the canal remained very considerable, there being always sufficient to work the turbines, which has not generally been the case. The drinking water in all the barracks was boiled and stored in galvanized iron tanks, or "gurrahs," being carried to these in iron buckets. But as the unboiled supply was easily available, it is impossible to say that the men drank only the boiled water. The outbreak had none of the characteristics of a water epidemic, viz., the occurrence of a large number of cases in quick succession, spread among all those using the water and rapid decline. Only 5 cases occurred among the general population, 1 probably contracted elsewhere ; while among the troops the incidence was six times greater in the 15th Hussars than among the remainder. The periodical analyses of the water, made by the Chemical Analyst of the Province, showed uniformly satisfactory results during the year ; and in a bacteriological examination which the Command Sanitary Officer made, he failed to find the *B. typhosus*, or any organism indicating sewage contamination (*Streptococci*, *B. coli*, or *B. enteritidis sporogenes*). The milk supply at the 15th Hussars was from the regimental dairy in the lines. This was managed by a native, under European supervision. The water used was the pipe supply, and the methods were satisfactory. Approximately 40 pints of milk were supplied per day to the men : 10 pints each to the Royal Army Temperance Association and coffee-shop, and 20 pints to the married people. No case of enteric fever occurred amongst married men, women, or children ; while of 26 men suffering from the disease, 7 denied having drunk any milk at all. As far as could be ascertained, none of the men of other corps who suffered from the disease had milk or butter from this source ; of the officers 2 out of 4, and of the 5 cases among the general population only 1. No connection could be traced between the

incidence of the disease and any place frequented by the men. Of 26 men of the 15th Hussars who were attacked, 6 stated that they had had nothing to eat or drink in the Royal Army Temperance Association Room within a month of being attacked, and 10 gave similar replies regarding the coffee-shops. A still smaller proportion of the cases had frequented either of the soldiers' homes. The "sadr" bazar the only one in which there was anything to attract the men, was out of bounds from April until 23rd October; and of 30 men of different corps who had enteric fever, only 2 admitted having had anything to eat or drink in any bazar within a month of being attacked. All mineral water used in the 15th Hussars was made in the regimental factory from pipe water, which was first boiled. No other corps was supplied by this factory. Uncooked vegetables, onions, cucumbers, and tomatoes, obtained from the regimental institutes and from hawkers, were eaten by some of the men; 14 of 31 cases admitted this. It was ascertained that some of these vegetables were grown on land which had previously been manured with human excreta (but not after the crops had grown), and there was no evidence to connect the disease with them. No green fodder had been used for the horses. Washing of clothes was carried out with well-water, at regimental tanks a short distance from the lines, and clothes were ironed and stored in a swimming bath, which had been appropriated for the purpose. Kitchen cloths were washed by the cooks at the kitchens. No means of infection by clothing or bedding could be traced. No source of infection from hospitals could be traced. Only 2 of the cases had been recently in hospital before being attacked. Of cases in other corps than the 15th Hussars, only 2 could be traced to have had food or drink in or from their lines, and of the 5 cases among the general population only 1. It would thus seem that the epidemic was not due to one central source of infection, but that infection was widely diffused in the lines of the 15th Hussars, and to less extent elsewhere. If this supposition be correct, and it coincides with modern experience of a considerable proportion of the enteric fever occurring both in India and elsewhere, that in all probability the latrines and day methods of removal of excreta must be looked upon as the centres from which the infection is spread. In the lines occupied by the 15th Hussars each kitchen has a latrine within some 30 yards of it, and in one case within 18 yards. In the lines of the other British corps the latrines are, for the most part, at the opposite ends of the rows of barracks from the kitchens. During the present autumn, flies have been unusually prevalent, and very markedly so in the 15th Hussars' lines and in the west end of the station; the latrines, open refuse pits, and adjacent kitchens literally swarmed with them. The excess in these lines may possibly be in part accounted for by the horse lines, and some 200 dairy cows and buffaloes stabled in the men's lines, or by the position (about a mile south-west) of some filth trenches, the prevailing wind being from the west. In these trenching grounds, as also in the others round the cantonment, the soil contains innumerable maggots, the *larvæ* of flies. The soil is dry and dusty, and easily blown about by the considerable wind which blew daily. It would thus seem that infection once introduced into the latrines, the conditions were exceedingly favourable to its dissemination by means of dust carried by flies and wind, and attached to the persons and clothes of the men, and so reaching the kitchens and barrack rooms. In the latter it was noticeable that the bread was left exposed to dust and on shelves behind the men's beds. To see if bacteriological evidence could be obtained to support this, the Command Sanitary Officer made cultures from flies caught in the latrine and kitchens, and although he did not find the *B. typhosus*, there was no difficulty in either case in isolating typical *B. coli communis*, which were present in very considerable numbers. But as this bacillus is to be found in the intestinal contents of flies, it cannot be taken as conclusive evidence that the flies had come from the latrines. The following recommendations were made and carried out:—

(1) That the men's barracks should be vacated, the troops going into camp and having new blankets issued to them, leaving all their old bedding behind.

(2) That all blankets, "satrinjis," mattress covers and coir stuffing be disinfected by boiling for twenty minutes.

India.

(3) That the latrines be dismantled, the receptacles, earthenware and iron, thoroughly heated over a fire, the woodwork treated with mercuric perchloride solution (1–1,000), and then scrubbed with soap and hot water, and floors and walls of all parts of the latrine sprayed with mercuric perchloride solution (1–500).

The disinfection of such a large quantity of bedding was a matter of considerable difficulty. Steam disinfectors are very much required at large stations.

After the carrying out of these measures, five cases occurred in the regiment, the last being admitted to hospital 19 days after the regiment moved into camp. All these may, therefore, be presumed to have been already infected, so that no further infection took place after the disinfection and removal of the men. This confirmed the view of the means by which the disease was being propagated.

At Lucknow the admissions numbered 94, and the deaths 12, as compared with 54 admissions and 12 deaths in the preceding year.

	January.	February.	March.	April.	May.	June.	July.	August	September.	October.	November.	December.
Admissions	15	7	14	28	7	3	1	4	1	6	3	5
Deaths..	1	1	1	2	—	1	1	—	1	1	1	2

The admission ratio was 38·0, and the death rate 4·86 per 1,000, against 28·5 and 6·33, the corresponding rates for the preceding year. Nothing definite as to the source of infection could be ascertained either by the Command Sanitary Officer (Major A. R. Aldridge, R.A.M.C.) or by the Medical Officers serving in the station. It was thought possible that the barrack surroundings, especially the latrines used by the troops, had become infected, and that the disease was thereby propagated. Acting on this supposition, the latrine used by and the barrack-room from which each case came to hospital was thoroughly disinfected, and the men's clothing and bedding brought to hospital for the same process. In hospital, all enteric fever cases were isolated, and everything connected with them thoroughly disinfected, and when convalescent, *urotropine* was given for some time before discharge. It was also thought possible that the washing arrangements for the troops' clothing may have had something to do with the spread of the disease, and, consequently, the construction of a laundry where all clothes could be "boiled-steamed," and afterwards washed, was recommended by the Officer Commanding station hospital, as is being done at Dalhousie and Peshawar.

Nasirabad had 82 admissions and 16 deaths, as compared with 18 admissions and 5 deaths in the previous year.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	1	1	39	14	5	1	—	3	7	5	6	—
Deaths..	—	—	4	6	3	1	—	—	2	—	—	—

The admission ratio was 121·8, and the death rate 23·77 per 1,000, against 48·6 and 13·51, the corresponding rates for the preceding year. This very

marked increase in the admission ratio is stated to be due to the youth of the garrison, and their recent arrival in India, nearly all the cases occurring amongst young men of the Seaforth Highlanders, who arrived in the station from Egypt on 20th February. *India.*

On 3rd March the first two cases of enteric fever were admitted; one a man who landed in India 31st December, 1902, and the other on 12th February, 1903; showing that the disease had almost certainly been contracted in this station. From 17th March to 29th March the disease became epidemic and was at its height, 36 cases occurring. After the last date there was a marked drop in the number of cases and the end of April practically saw the outbreak over. From 5th March to 30th April there were 53 cases. All the cases were among the Highlanders except one (an artilleryman). The outbreak thus began on the fourteenth day after the arrival of the Seaforth Highlanders in the station, *i.e.*, they probably began to be infected from the day of their arrival, and this period of extreme infection lasted until 15th March or 21st March. It must be remembered that a battery of Artillery arrived in the station from Killod Practice Camp on 23rd March, 1903, and the men were practically free from the disease. The Highlanders were by no means careful after they arrived about what they ate and drank, or the source of their milk supply. After 14th March every stringent regimental orders about the purity of the milk supply and sanitation generally were issued, and strictly enforced. Cows were brought to the lines and milked there, under supervision of soldiers. The milk was taken to a central cookhouse, boiled and distributed in cans, by soldiers. All through the winter there was a plague of flies in Nasirabad, and these were bred chiefly in the cantonment filth pits, and were brought on dirty carts in hundreds to the barracks. This has now been remedied by the introduction of Colonel Thornhill's "Bareilly System." The filth carts on 24th March were ordered to ply by night, to stop the importation of flies, so regimental initiative aided in stopping the outbreak, and no doubt the disease had been really propagated directly by the filth pit flies. While the artillery were free from disease the Seaforths suffered. The reason of this is attributed to the fact that the Seaforths became infected by drinking polluted milk, and probably polluted bazar drinks. The artillery had suffered the previous year, and were more wary. All recommendations sent to Commanding Officers were carried out. Copies of advice to young soldiers in India were issued and hung up in all barracks and regimental institutes. After 30th April to the end of the year there were 27 cases of enteric fever, 5 in May, 1 in June, 3 in August, 7 in September, 5 in October, and 6 in November. During these months flies were again troublesome, and the cases were attributed in all probability to fly infection. From 8th December the "Bareilly System" of disposal of excreta has been in force, and there has since been no enteric fever. There is great hope that if fly infection can be stopped in Nasirabad enteric fever will be reduced.

At Mhow there were 75 admissions and 12 deaths as compared with 37 admissions and 8 deaths in the previous year.

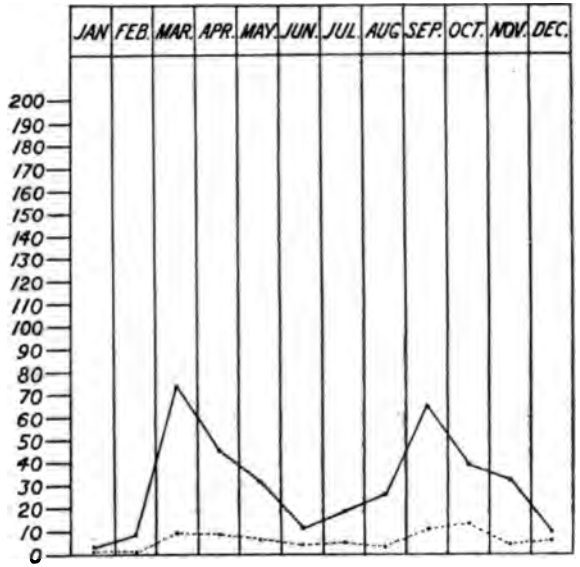
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	2	3	16	17	12	6	5	5	3	4	1	1
Deaths	—	1	1	1	2	1	2	1	2	—	—	1

The admission ratio was 48·0 and the death rate 7·69 per 1,000, against 34·8 and 7·53, the corresponding rates for the preceding year. The difference is due to an outbreak in the 10th Royal Hussars, composed largely of young soldiers new to the tropics, which furnished two-thirds

SEASONAL PREVALENCE OF ENTERIC FEVER IN INDIA DURING 1903.

Bombay Command.

Average Strength, 15,846.

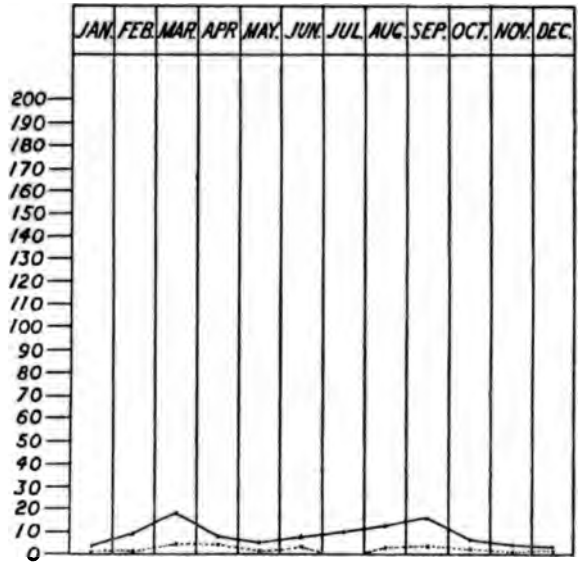


ADMISSIONS SHOWN THUS ——— DEATHS SHOWN THUS ·····

ADMISSIONS	3	9	74	46	32	12	19	27	65	39	33	10	= 369
DEATHS	1	1	9	9	7	4	5	3	11	14	4	6	= 74

Madras Command

Average Strength, 9,337.

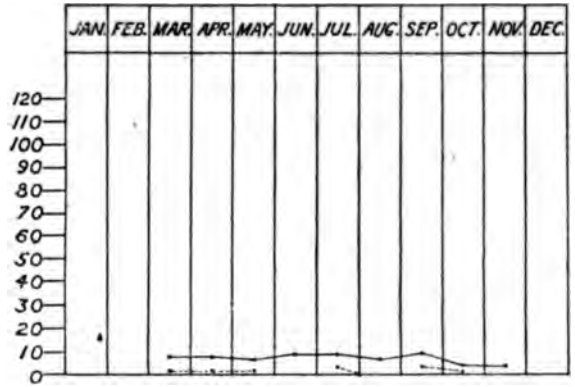


ADMISSIONS SHOWN THUS ——— DEATHS SHOWN THUS ·····

ADMISSIONS	3	9	18	8	5	8	10	13	17	7	5	3	= 106
DEATHS	1	1	4	4	1	3	–	3	4	2	1	2	= 26

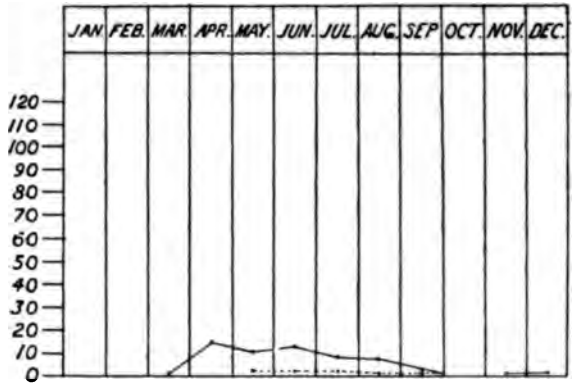
ENTERIC FEVER. ADMISSIONS AND DEATHS AT HILL STATIONS IN 1903.

Bengal Command.



ADMISSIONS	0	0	7	8	6	9	9	6	9	4	3	0 = 61
DEATHS	–	–	1	1	1	–	3	–	3	1	–	– = 10

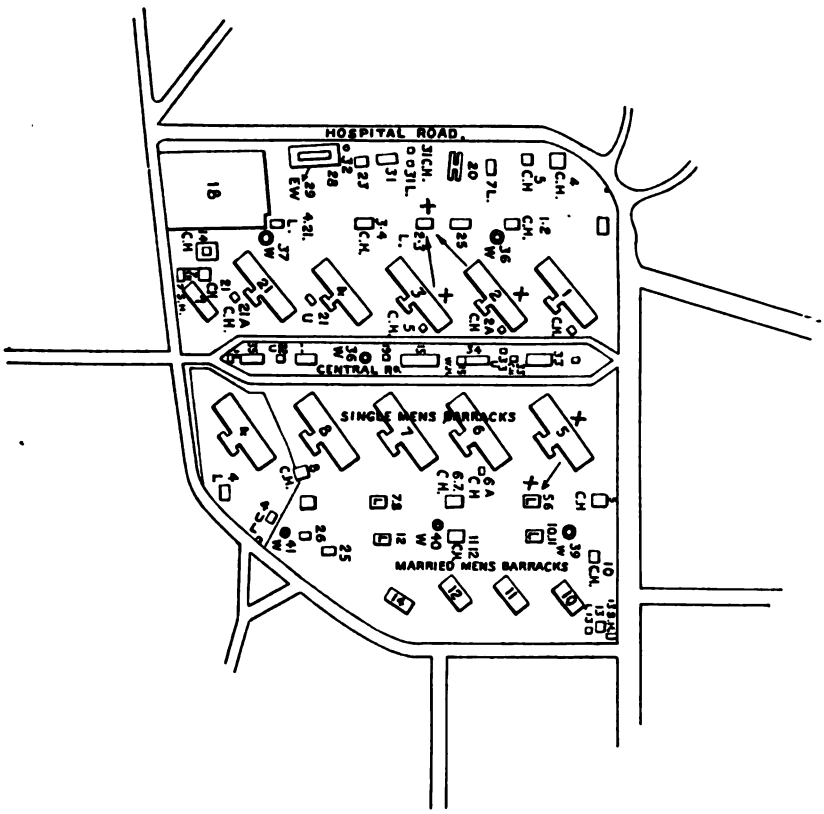
Punjab Command.



ADMISSIONS	–	–	1	14	10	13	8	7	2	–	1	1 = 57
DEATHS	–	–	–	–	2	2	2	1	1	–	–	– = 8

India.

ENTERIC FEVER AT RAWAL PINDI, 1903.



Sketch Plan of Barracks occupied by the 1st Battalion Wiltshire Regiment at Rawal Pindi. The Bungalows and Latrines marked with a cross X are those which were used by the first cases of Enteric Fever admitted, and around which the disease became epidemic.

from No. 5 Bungalow, the next two from Nos. 2 and 3 Bungalows respectively (these bungalows, and also the latrines used by the men of them, are marked with a cross on the plan). The cases, in sequence according to the barrack bungalows from which they came, were as follows :—

No. 1	case,	in	November,	from	No. 5	Barrack, Bungalow.
No. 2	,,	,,	,,	,,	No. 2	,,
No. 3	,,	,,	,,	,,	No. 3	,,
No. 4	,,	,,	December,	,,	No. 3	,,
No. 5	,,	,,	,,	,,	No. 4	,,
No. 6	,,	,,	,,	,,	No. 3	,,
No. 7	,,	,,	,,	,,	No. 5	,,
No. 8	,,	,,	,,	,,	No. 3	,,
No. 9	,,	,,	,,	,,	No. 3	,,
No. 10	,,	,,	,,	,,	No. 5	,,
No. 11	,,	,,	,,	,,	No. 2	,,
No. 12	,,	,,	,,	,,	No. 5	,,
No. 13	,,	,,	,,	,,	No. 5	,,
No. 14	,,	,,	,,	,,	No. 5	,,
No. 15	,,	,,	,,	,,	No. 2	,,
No. 16	,,	,,	,,	,,	No. 7	,,
No. 17	,,	,,	,,	,,	No. 5	,,

From this it will be seen that—

From	No. 5	Barrack came	7 cases.
,,	No. 3	,,	5 ,,
,,	No. 2	,,	3 ,,
,,	No. 4	,,	1 ,,
,,	No. 7	,,	1 ,,
Total....		....	17 cases

When the first patients arrived in hospital, it was believed that personal contact was the cause of the spread, and most elaborate disinfection and precautions were taken, but when it was found that the 6th case shown as coming from No. 3 Barrack was really living in a tent behind the building, and that the cases were not coming from contiguous beds but scattered about the rooms, another cause was sought for, and the latrines and urinals were taken in hand. If the plan is again referred to, it will be seen that, taking Nos. 2, 3 and 5 Bungalows as the infected ones, the latrine accommodation was as follows. All the men in Bungalow 5 used one latrine, shown by a cross and arrow in plan. All the men in Bungalows 2 and 3 used the same latrine shown by a cross and arrow on plan. The cases from Nos. 4 and 7 Bungalows which did not use either of these latrines were both men of the last draft and probably contracted the disease where the first three men did. The methods adopted for the purification of the affected latrines was to thoroughly scrub all woodwork with perchloride of mercury solution, destroy all the old pans, light fires under the iron urine troughs, and remove all infected earth, new pans and new porcelain troughs were put in. In each pan was placed a small quantity of a 5-per-cent carbolic acid solution, and after the soldier used it and put in dry earth, it was *immediately* taken away. No man was allowed to use the pan again till it had been scrubbed and fresh lotion put in. The urine tubs were also provided with antiseptics. This entailed labour, a great expenditure of disinfectants, and very close supervision. The officer commanding however was fully equal to the occasion and orderlies were appointed to supervise and medical officers inspected the latrines daily. The result by the end of the year was satisfactory and the epidemic was stopped. It is perhaps not out of place to be optimistic on what must be a good object lesson in the prophylaxis and treatment of enteric fever, but as far as we can see now, from the time the latrines were fairly taken in hand and allowing for those already in the incubation stage, the attacks ceased.

The system of working these latrines as noted above was of course continued, and it is not proposed for one moment, in our efforts to minimise the risk of latrine contagion, to lose sight of what is beginning to be thought

India. perhaps the most important facts in the spread of enteric fever, personal contact.

Taking the series of cases among the 9th Lancers, about which there is not so full information, and the series in the Wiltshires, it will be seen that in both these epidemics the disease was imported by a "last draft" and that by them it was spread to the rest of the regiment. Accepting this, we must also understand that spread of all kinds is more or less preventable and that responsibility of the sanitary officer in this matter is still more increased.

The conclusions we can draw from these epidemics in India, and their relation to the etiology of enteric fever, is that our first duty is to consider the possibility of infected latrines and urinals, thoroughly clean and render them innocuous, have every article of a patient's personal effects completely disinfected and treat the disease generally as a highly contagious one. To do this properly requires great supervision on the part of the regimental authorities; the sanitary officer must explain how things are to be done, and regimental officers should carry these out. A steam sterilizer is an absolute necessity in every large station and they will have to get them. The source of infection in all the cases that occurred during the year has not been traced, but those not included in the two groups detailed above, were of the variety of those isolated attacks which occur from time to time and to which it is almost impossible to assign a cause. Among the notes on the progress of the cases under treatment, a very marked feature noticed is one noted by other observers before, viz., that in the epidemic among the 9th Lancers most of the cases were fairly mild and free from complications, while in that of the Wiltshire regiment, the attacks were all most virulent. This is a fact that all observers of enteric fever in India must note, but one that is very difficult to explain.

Peshawar had 55 admissions and 16 deaths for enteric fever as compared with 20 admissions and 8 deaths in the previous year.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	—	—	—	—	9	31	1	1	5	3	3	2
Deaths..	—	—	—	—	3	8	1	—	—	2	1	1

The admission ratio was 33·8 and the death rate 9·85 per 1,000, against 13·8 and 5·54, the corresponding rates for the preceding year. Latrine infection is suggested as the cause of this epidemic. From May to October flies were abundant and dust storms prevalent, but for the latter part of the year, the opinion was held that the cause was a more general one, and might be attributed to water, milk, or contaminated supplies. This opinion is based on the following facts:—during the first period no women or children were attacked, whereas during the latter part of the year they were. It is a well-known fact, that commodes are largely used by the married families, and if excreta is quickly removed, the risk of infection is diminished. Also that from October there were very few flies to carry infection. Taking into consideration the time when epidemics usually occur, viz., the beginning of the hot weather, it may be inferred that latrine infection is a very probable cause, but in cases occurring later in the year the cause must be sought for elsewhere, and during this period the water was under suspicion, one of the filter beds being worked too heavily.

Quetta had 42 admissions and 6 deaths for enteric fever as compared with 77 admissions and 18 deaths in 1902.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	—	—	1	—	—		6	6	7	5	13	3
Deaths..	—	—	—	—	—		1	1	1	—	1	1

The admission ratio was 17·2 and the death rate 2·45 per 1,000, against 33·0 and 7·71, the corresponding rates for the preceding year. The cases were of a mild type and are attributed chiefly to water-borne infection. In 10 cases the disease is attributed to drinking unauthorized water during Quetta manœuvres, in 7 cases to drinking unauthorized water on the way to, and from, Camp Ziarat, and in 1 case at Regi; 2 cases were imported from Deolali and 1 from Sibi, both probably contracted on the railway line. The remaining 21 cases were probably due to men drinking water from unauthorized sources, when out of cantonments. The water supply of the cantonment is above suspicion, and so also is that of the camp at Ziarat. The majority of the cases it was thought were contracted by men drinking "kareze" and channel water when out of cantonments; and also probably, to a slight extent, due to infection being carried by dust storms.

Bangalore had 41 admissions and 9 deaths for enteric fever, as compared with 18 admissions and 4 deaths in the previous year.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	—	7	14	2	3	4	4	3	3	1	—	—
Deaths..	—	—	4	1	1	1	—	—	1	1	—	—

The admission ratio was 18·7 and the death rate 4·10 per 1,000, against 12·0 and 2·67, the corresponding rates for the preceding year. The marked increase in 1903 as compared with 1902, is stated to be due to the advent of a large number of young non-acclimatised men in September, 1902, at the susceptible age. This increase it is believed would have been greater but for the fact that the very large majority of the men came from South Africa, as it was ascertained by individual cross questioning, that very many of them had suffered from the disease there and were consequently partially immune. A moderately severe epidemic in February and March accounts for 21 of the 41 cases. This outbreak was limited almost entirely to the Essex Regiment and more particularly to its left wing. These companies used a common latrine and have a common cookhouse. The former was considered to be infected, although it was not possible to trace the outbreak directly to its use; it was thoroughly disinfected. The cookhouse was in good order, and the milk supply was not partaken of in any quantity by the men attacked. The outside restaurants also fell under suspicion, and on inspection, some of them being found to be in a most insanitary condition, necessitated all being placed out of bounds. It is of interest to note that in this epidemic flies can be fairly excluded, as there were practically no flies in Bangalore at that time, in fact its immunity from them was quite remarkable. Even the cookhouse and slaughterhouse were free from this.

India. Sialkot had 39 admissions and 12 deaths for enteric fever, as compared with 31 admissions and 10 deaths in 1902.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	—	—	2	2	1	9	1	1	4	4	9	6
Deaths..	—	—	1	—	—	—	5	—	1	2	2	1

The admission ratio was 32·6 and the death rate 10·04 per 1000, against 27·5 and 8·88, the corresponding rates for the preceding year. The first two cases were from "F" Battery, Royal Horse Artillery and were admitted from the line of march. The Royal Horse Artillery lines were clear of any insanitary defect, and there was nothing to show that they had any part in the causation of the epidemic. The 3rd Hussars and 2nd Gordon Highlanders followed with 15 cases with 5 deaths in the former, and 16 cases with 4 deaths in the latter. Owing to contamination with *Bacillus coli* from native pollution, the water supply was condemned by the Command Sanitary Officer. The bazar was also suspected, owing to the close daily intercourse with it between syces, servants, and followers.

At Jhansi there were 37 admissions and 11 deaths for enteric fever, as contrasted with 10 admissions and 5 deaths the previous year.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	10	1	10	6	1	—	—	2	2	1	1	3
Deaths..	2	—	2	2	—	1	—	—	1	—	1	2

The admission ratio was 38·7 and the death rate 11·51 per 1,000, against 13·4 and 6·69, the corresponding rates for the preceding year. The increased admission ratio is attributed to the arrival of two batteries of Royal Field Artillery from South Africa, which included a number of young soldiers in their ranks, the 7th Battery having 19 admissions with 6 deaths, and the 66th Battery 8 admissions with 1 death. Both these batteries had the same water and milk supplies, both of which were above suspicion. The proximity of the latrines with their dry-earth system to the cookhouses, allowing of flies carrying infection from excreta to food, was suspected as the most prominent channel of infection in this station.

Ranikhet had 33 admissions and 4 deaths for enteric fever, as compared with 25 admissions and 5 deaths in 1902.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	—	—	3	3	4	6	4	4	4	3	2	—
Deaths..	—	—	—	—	1	—	1	—	2	—	—	—

India.

The admission ratio was 27·3 and the death rate 3·31 per 1,000, against 26·3 and 5·27, the corresponding rates for the preceding year. The increased admission ratio is again put down to the arrival of drafts of young soldiers fresh to the country and unacclimatized. There is no doubt that the fluctuation of enteric fever which exists in India depends to a large extent upon the susceptibility of the soldiers forming the garrison, and a large influx of young soldiers fresh out from England means an increased proportion of enteric fever cases.

At Secunderabad there were 32 admissions and 8 deaths for enteric fever, as contrasted with 18 admissions and 3 deaths the previous year.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	—	1	2	3	1	—	1	6	13	5	—	—
Deaths..	—	—	—	—	—	2	—	3	2	1	—	—

The admission ratio was 10·4 and the death rate 2·59 per 1,000, against 8·8 and 1·47, the corresponding rates for the preceding year. It may be noted that 29 out of the 32 cases admitted to hospital were under 25 years of age, and 50 per cent. of these had only one year, or less, of service, in India. The majority of the cases occurred in the 1st Battalion Middlesex Regiment, chiefly in drafts, or in men who had come from Wellington, where the disease was prevalent.

Jubbulpore had 31 admissions and 3 deaths for enteric fever, as compared with 21 admissions and 7 deaths in 1902.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	—	—	2	3	2	3	8	8	4	1	—	—
Deaths..	—	—	—	—	1	—	—	1	—	1	—	—

The admission ratio was 42·1, and the death rate 4·07 per 1,000, against 37·1 and 12·37, the corresponding rates for the preceding year. The increased admission ratio is attributed to the arrival of a draft of young soldiers from England in the early part of the year.

Dinapore had 28 admissions and 8 deaths for enteric fever, as contrasted with 3 admissions and no deaths in 1902.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	2	—	—	3	1	—	—	—	11	11	—	—
Deaths	—	—	—	—	1	—	—	—	1	6	—	—

India.

The admission ratio was 49·7, and the death rate 14·21 per 1,000 against 5·3 and nil, the corresponding rates for the preceding year. The large increase in the admission rates as compared with the previous year was due to an epidemic which broke out in September; the first case occurring on the 17th of that month, and the others following in quick succession up to the 15th of October. The Command Sanitary Officer (Major Aldridge, R.A.M.C.) was ordered to Dinapore and on careful investigation found that the following points were very noticeable in the outbreak:—

(*a*) The occurrence of a number of cases in very quick succession, and the cessation of the epidemic within a month, which gave it the characteristics of a water or milk-borne epidemic.

(*b*) That the outbreak was entirely confined to the officers, men, women and children, and attacked only the King's Own Scottish Borderers; no case occurring in the battery or general population, and in no case could infection be traced to men in hospital.

(*c*) The age and length of service in India of those attacked showed that the incidence of the disease was not determined by a greater proportion of susceptible individuals, nor by any local conditions in barracks. On examining the water supply, it was found that it was piped from a well in the station hospital compound, and that up to the 10th September, all the drinking water in the station was filtered by a Pasteur Chamberland filter. On the 10th September, however, filtration stopped, owing to failure of the filter, and the first case of enteric fever was admitted to hospital seven days later. The question at once naturally arose as to whether the well water was contaminated, but on analysis, the Command Sanitary Officer failed to find the *Bacillus typhosus*, although he isolated *Bacillus coli communis* and *Bacillus enteritidis sporogenes*, which are both fæcal organisms; neither of these had been detected in the examinations made of this well water during the two previous years. Chemical analysis also showed considerably more chlorine and free ammonia than previously. The well was disinfected by means of lime, and from 4th October all drinking water was boiled, and the epidemic ceased eleven days later. The Command Sanitary Officer also found that the milk supply of the troops was defective, and that enteric incidence exactly corresponded with milk supplied from one source. This source supplied the Regimental Officers' and Sergeants' Messes, Regimental Institutes and families, as well as the men of the regiment, amongst whom all the cases were confined. This supply was not used by the rest of the garrison or the other two garrison Institutes, amongst whom no cases occurred. The milkman kept his milk cans in his house, a dirty hovel in the "sadr" bazar, situated amongst the filthiest surroundings, and occupied by his family. The butter supplied to the regiment was made from milk from the same source by another man who had a shop in the regimental bazar, but who kept his butter-making utensils in his own house in another place, which was also occupied by a large family.

Kamptee had 26 admissions and 5 deaths for enteric fever as compared with 2 admissions and 1 death in 1902.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	—	—	—	5	2	1	1	2	8	6	1	—
Deaths..	—	—	—	—	—	—	—	—	2	2	1	—

The admission ratio was 28·2 and the death rate 5·43 per 1,000 against 2·8 and 1·42, the corresponding rates for the preceding year. Of the 26 cases 16 occurred in men of 25 years of age and under; 50 per cent. of the total occurred in men of under 2 years' Indian service. In attempting to trace out the source of infection, no clue could be ascertained from the history of individual cases. The epidemic occurred indiscriminately in the different barrack rooms, and there appeared to be no connection between cases either as to time or place. In very few instances had the men been out of the station. All water was boiled in Larymore boilers and treated with permanganate of potash before being used for drinking. The close proximity of latrines to cookhouses in the British infantry lines (50 paces or less) was thought to be a likely factor in the causation of the disease, flies in all probability acting as carriers of infection. Again it was noticeable that during the months of September and October, route marching and military training were carried out, and it is possible that this extra fatigue acted as a predisposing cause during this the period of greatest prevalence. *India.*

Agra had 22 admissions for enteric fever with 6 deaths as compared with 4 admissions and 2 deaths in 1902.

	January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November.	December.
Admissions	—	—	4	7	3	1	—	1	2	2	—	2
Deaths..	—	—	1	1	1	—	—	—	2	—	—	1

The admission ratio was 19·9 and the death rate 5·43 per 1,000 against 3·9 and 1·96 the corresponding rates for the previous year. The admission rates show a large increase over last year, and are attributed to more careful diagnosis with proportionate decrease of simple continued fevers. Infection is attributed to bazar sources, and it is thought that the Indian cantonment bazars should receive greater attention than they do.

Fyzabad had 20 admissions and 4 deaths for enteric fever as compared with 19 admissions and 1 death the previous year.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Admissions	1	—	1	3	13	2	—	—	—	—	—	—
Deaths..	1	—	—	—	2	1	—	—	—	—	—	—

The admission ratio was 20·2 and the mortality rate 4·03 against 29·1 and 1·53 respectively for 1902, thus showing a decrease in the former but an increase in the latter. The source of the disease was not traceable, though every effort was made. Youthful inexperience amongst recent arrivals at the advent of the hot weather was thought to account for many of the cases. The water and milk supplies were good. The wells were treated with permanganate of potash, and all wells supplying drinking water were covered, and, in addition, all drinking water was boiled. The mineral water factory and dairy were under strict European supervision, and all conservancy arrangements were satisfactory. The barracks, from which cases were admitted, were thoroughly disinfected and cleansed, the areas occupied by the affected men were washed with perchloride of mercury solution and also

India.

the latrines, wood work, furniture, and clothing were fumigated and washed in accordance with regulations drawn up by the Sanitary Officer, Army Headquarters, India.

Other Continued Fevers.—There were 1,299 admissions for simple continued fever with one death, and 9 admissions for Mediterranean fever with no deaths. The average number of men constantly sick was 59·24, giving a constantly sick ratio of ·85 per 1,000, which was ·05 above last year's rate, and ·48 below the decennial average. The admission ratio was 18·8 per 1,000, and the death rate ·01, showing increase of 4·7 in the former and decrease of ·01 in the latter as compared with the corresponding rates for 1902. Compared with the average rates for the preceding ten years, there was a decrease of 9·4 in the admission ratio and of ·02 in the death rate. The highest admission ratio was 63·1 in the Narbudda district, which was an increase of 56·8 as compared with the rate for the preceding year. The next highest admission ratios were 62·4 in the Lahore district, an increase of 46·5, and 51·6 in the Oudh district, an increase of 36·7. The lowest ratios were ·7 in the Poona district, against 11·3 in 1902, and 1·4 in the Southern and Deesa districts, against 5·8 and 5·0 respectively in the previous year.

Cholera.—There were 79 cases of cholera with 56 deaths, against 3 fatal cases in 1902. The admission and mortality ratios were 1·1 and ·80 respectively, against ·1 and ·05 in the preceding year, and ·9 and ·69 the decennial average rates.

Abstract XXVII shows the stations at which cholera occurred during each quarter of the year. There were 8 admissions with 5 deaths during the first quarter, 26 admissions with 23 deaths in the second quarter, 45 with 28 deaths in the third quarter, and there were no cases in the last quarter. At Ranikhet 24 cases occurred of which 16 terminated fatally. The disease prevailed extensively in the district and accounted for upwards of 1,000 deaths amongst the civil population. Notwithstanding every precaution the disease spread to cantonments breaking out in July among the 2nd Kings' Shropshire Light Infantry, to which regiment it was practically confined. Thirteen cases with 11 deaths occurred at Mian Mir in June; the disease being chiefly confined to the 46th Battery, Royal Field Artillery, whose milk supply was suspected. At Sialkot 10 cases occurred in September of which 6 proved fatal; this outbreak occurred in the lines of "K" Battery, Royal Horse Artillery.

At Fort William there were 8 admissions with 5 deaths in February; the source of infection was attributed to contaminated water drunk on the line of march from Fort Chingrikhal. At Umballa there were also 8 cases, the first case occurring in April and the last in September, of these 6 proved fatal. The disease was prevalent in the district and the spread of infection within cantonments was attributed to native servants and punkah coolies. Peshawar had 5 cases all fatal, the disease occurring from May to July when the weather was very hot and sultry. Cases of cholera also occurred at Quetta 2, (June and August, 1 fatal), Rawal Pindi 2, (May, both fatal), Dinapore 2, (May and July, 1 fatal), and 1 case each at the following stations:—Cawnpore (August), Naini Tal (July, fatal), Jullundur (September), Dalhousie (June, fatal), and Shwebo (July, fatal).

Dysentery.—There were 1,133 admissions with 42 deaths, the latter including an invalid who had left the Command, as compared with 1,238 admissions with 44 deaths in the preceding year. The admission and mortality ratios were 16·3 and ·60 per 1,000 respectively, against 20·4 and ·73 in the preceding year. Compared with the average rates for the preceding ten years, there were decreases of 10·0 and ·20 respectively in the corresponding ratios. The average number of men constantly sick was 93·59, giving a constantly sick ratio of 1·34 per 1,000, lower by ·10 and ·53 than last year's and the decennial average rates respectively.

Abstract XXVIII shows the prevalence of disease in each district in India, and Abstract XXIX its prevalence in each quarter of the year. The highest admission ratio, was 65·6 per 1,000, in the Rangoon district,

showing an increase of 23·5 on the previous year's rate. The Madras district comes next with a ratio of 33·0, an increase of 10·0, followed by the Presidency district with 29·8, a decrease of 37·2. Like last year Deesa district shows the lowest admission rate 7·2 per 1,000 with an increase of ·6 on 1902. Next comes the Lahore district 9·0 with a decrease of 4·9, Nagpur district 9·1 with a decrease of 9·2, and the Sind district 9·2 with a decrease of 13·3. The Presidency district which occupied the highest place successively for the last five years shows this year a considerable decrease (37·2, the largest decrease in this disease) having 29·8 against 67·0 in 1902. Like the admission rate the highest death rate, 8·21 per 1,000, occurred also in the Rangoon district with an increase of 6·29 over the rate of last year. The next highest mortality ratio, 2·56, was in the Bundelkhand district, an increase of 2·05 on the rate of the preceding year. Lahore and Southern districts show also high death rates 1·42 and 1·40 respectively, against ·50 and *nil* during the last year. There were no deaths during the year in the Narbudda, Rawal Pindi, Madras, Belgaum, Mandalay, Poona, Bombay, Deesa, Aden, Sind or Quetta districts. With the exception of the above, Meerut district shows the lowest death rate, ·23 per 1,000, or a decrease of ·39 as compared with the preceding year's rate. Next come ·25 in the Sirhind district, a decrease of ·12, ·32 in the Secunderabad district, (where there were no deaths reported to have occurred during 1902), ·35 in the Peshawar district a decrease of ·05, ·57 in the Oudh district an increase of ·03, ·64 in the Allahabad district a decrease of 1·06, ·69 in the Presidency district a decrease of 1·76, ·83 in the Rohilkhand district, an increase of ·16, and ·91 in the Bangalore, district (which also had no deaths during 1902). In consort with the admission rate, the Presidency district shows the largest decrease in the death rate during 1903. Comparing the four quarters of the year, as to the prevalence of the disease, the largest admission ratio, 4·6 per 1,000, took place in the fourth quarter, followed by 4·4 in the third quarter, 4·2 in the second quarter, and 3·1 in the first quarter. The highest mortality ratio, ·23 per 1,000, occurred in the third quarter, followed by ·19 in the fourth, ·11 in the second, and ·06 in the first quarter. The largest number of cases occurred at Rangoon 64 with 8 deaths, compared with 43 admissions and 2 deaths in 1902. The disease broke out in epidemic form, and was most prevalent during the monsoon months. Fourteen cases occurred both in June and July, and 7 in August. Many of the cases were very severe and of the amœbic variety. At Secunderabad there were 57 admissions with 1 death against 45 with no deaths during 1902. Meerut returned 52 cases against 32 and 1 death in the preceding year. Lucknow had 50 admissions against 49 in 1902. There was one death in each year. Forty-nine cases occurred at Mhow against 30 in the last year. The number of deaths 2, being the same in both years. *India.*

Barrackpore, where the largest number of cases of dysentery have occurred for several years past, and which may be considered an endemic area for dysentery, has under energetic prophylactic measures considerably reduced its admission ratio this year. The death rate of the civil population of the district of South Barrackpore from this cause from 1899-01 was 3·55 as compared with ·76 for the Province of Bengal. The following table shows the incidence among the troops :—

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DYSENTERY AND LIVER ABSCESS AT BARRACKPORE. ADMISSION RATES PER 1,000 PER ANNUM.

Year.	British Troops.		Native Troops.
	Dysentery.	Liver Abscess.	Dysentery.
1871–80	90·1	—	—
1881-90	49·6	—	145·4
1891..	47·5	3·2	305·6
1892..	52·5	5·8	190·6
1893..	85·1	5·5	106·3
1894..	118·2	3·0	82·6
1895..	126·0	0·0	44·6
1896..	153·0	14·0	41·6
1897..	116·2	18·07	35·7
1898..	122·8	2·99	53·7
1899..	230·3	6·06	48·9
1900..	163·4	16·34	49·3
1901..	304·4	35·2	21·4
1902..	235·5	52·4	225·5
1903..	151·1	31·1	64·1

It is noticeable that while there has been a very marked increase among the British troops since 1893, the figures for native troops show an equally marked decrease. If we accept the view, in support of which there is now a very considerable weight of evidence, that there are at least two distinct diseases included under the term dysentery, viz.—(1) amœbic, of which "tropical" liver abscess is a later manifestation; and (2) epidemic, or that common in gaols, asylums, and in armies in the field, and possibly caused by the bacillus described by Shiga and others, then it becomes of importance to determine whether one of these, or both, are responsible for the sickness and mortality at Barrackpore. That the amœbic form accounts for a considerable proportion of the cases is shown by the prevalence of liver abscess Of 15 cases examined microscopically by the Medical Officers at Barrackpore in all but two or three *amœbæ* were found in the stools, and of 10 cases examined by the Command Sanitary Officer (Major Aldridge, R.A.M.C.) at Barrackpore, Calcutta, and Dum Dum, agglutination with Shiga's bacillus gave negative reactions, while in 7 of the same cases examined for *amœbæ*, 6 gave positive results. Though far too few to base a definite opinion upon, these results give some reason to suppose that it is the amœbic form which is more common. At Barrackpore the disease increases in June, is at its maximum for the next four or five months, and then gradually diminishes. There does not appear to be any special prevalence in any particular part of the barracks. Investigations in many parts of the world have placed it beyond doubt that the epidemic form is an infective disease, of which the contagium is contained in the fæces of those suffering from it; and it is not unreasonable to assume the same for all forms of dysentery. The channels by which the contagion travels to reach a fresh individual are at present unknown, but judging from the analogous case of the *B. typhosus*, the only safe procedure is to protect all the many ways by which this bacillus is known to spread. Every case of dysentery should, therefore, be looked upon as a source of infection, and men with slight forms of dysentery and diarrhœa should not be allowed to remain out of hospital. It is probable that in the case of dysentery as of enteric fever direct infection among individuals closely associated is a more common means of spread than is generally supposed.

Malarial Fevers.—There were 16,756 admissions for ague with 21 deaths, and 281 admissions for remittent fever with 10 deaths, giving a total of 17,037 admissions and 31 deaths, with an average number constantly sick of 571·47. In addition there were 4 deaths among invalids who had left the Command, all due to ague. The ratios of admission were 244·7 per 1,000, that of mortality ·50, and that of constantly sick 8·21. The three ratios show decreases of 9·1. ·24 and 1·04 respectively as compared with the last year's, and of 87·0, ·18 and 3·84 compared with the decennial average rates. The highest admission rate was in the Aden district, with 655·2 per 1,000, being higher by 493·7 than the rate for the previous year. Next to this, the Deesa district shows 641·3, a decrease of 83·0, followed by Mhow district with 531·5, an increase of 56·7, Lahore district with 516·0, an increase of 96·5, Nagpur district 507·1, an increase of 223·4. The year shows some reduction in the severity of the disease, inasmuch as the admission, death and constantly sick rates were all lower than those of 1902, and also of the preceding decennial average. The highest ratio in 1902 was 724·3 in the Deesa district, while in this year this district shows a decrease of 83·0 per 1,000. The highest ratio in 1903 was 655·2 in the Aden district, which was much below the highest rate of the previous year.

Since 1901 there has been a gradual fall in the admission ratios. The following table shows the admission and the constantly sick rates since 1900 :—

Year.	Admission Rate.	Constantly Sick Rate.
1903	244·7	8·21
1902	253·8	9·25
1901	2:9·4	11·11
1900	321·1	11·74

Like last year, Madras district had the lowest admission rate, 35·0, showing a decrease of 36·8. The next lowest ratio was 79·1 in the Southern district, a decrease of 52·9, followed by 87·9 in the Bangalore district, a decrease of 53·0. Twelve of the 26 districts show increased admission ratios, the chief instances being 493·7, 223·4, 186·4 and 134·3 in the Aden, Nagpur, Belgaum and Rangoon districts. There were diminished admission ratios in 14 districts, the largest decreases being 335·6 and 240·4 in the Mandalay and Narbudda districts respectively. Similar to 1902, the highest mortality ratio was in the Mandalay district, 3·51, showing a decrease of 1·39 on the preceding year's rate. The next highest ratios were 1·43 in the Deesa district, a decrease of ·23, and 1·28 in the Allahabad district, where there were no deaths reported during the previous year, No mortality from malarial fevers occurred in the Oudh, Rohilkhand, Narbudda, Bundelkhand, Meerut, Peshawar, Bangalore, Belgaum, Rangoon, Aden, Sind, Nagpur and Quetta districts. Among the districts where deaths occurred, the lowest death rates were ·23 in the Poona district (where there were no deaths during last year), ·32 both in the Rawal Pindi and Secunderabad districts, showing decreases of ·67 and ·66 respectively, and ·35 in the Presidency district, which shows the largest decrease during the year (1·69). Of the 31 deaths, 9 occurred in the Mandalay district, 3 each in the Sirhind and Lahore districts, 2 each in the Allahabad, Rawal Pindi, Mhow and Bombay districts, and 1 each in the Presidency, Madras, Southern, Secunderabad, Poona, and Deesa districts, in the troops at the Delhi Coronation Durbar and manœuvres, and on the line of march.

India. The prevalence of malarial fevers in the four Commands and Burma district were as follows :—

Commands.	Average Strength.	Admissions.	Ratios per 1,000.	Ratios per 1,000.	
				Increase.	Decrease.
Punjab	17,997	5,703	316·9	27·8	—
Bombay	15,988	4,955	309·9	34·4	—
Burma District ..	3,617	807	223·1	—	145·3
Bengal	21,862	4,202	192·2	—	46·1
Madras	9,375	1,304	139·1	11·9	—

Compared with the rates in 1902, the admission ratios per 1,000 for malarial fevers in 1903 show increases of 736·4 at Mian Mir, of 638·5 at Sitabaldi, and of 563·6 at Amritsar. The greatest decreases in the admission rate on the previous year was found at Mandalay 942·0, 847·0 at Fort Attock, and 445·5 at Saugor.

Punjab Command.—The highest admission ratio in this Command occurred at Fort Lahore, where it was 1,107·1 per 1,000, as compared with 930·4 in 1902. The type of fever prevalent in the majority of cases was *benign tertian*, and the monthly prevalence was most marked in October and November. The species of mosquitoes present were not ascertained, but the incidence of malaria in this station is probably due to the low-lying marshy ground on the banks of the Ravee River, in the vicinity of the fort. No anti-malarial measures were adopted beyond the administration of quinine to the garrison, in 10-grain doses, on two successive days weekly. No fatal cases occurred. The second highest admission ratio was 1,055·2 per 1,000 at Amritsar. This is an increase of 563·6 on the rate for 1902; here again most of the cases were of the *benign tertian* type, but one case of *malignant tertian* occurred. The months of greatest prevalence were from September to the end of the year. A few *anopheles* mosquitoes were found in September. Tar was used to destroy the *larvæ* in the moat round the fort, kerosine oil was also placed in likely breeding places, sulphur was burned in buildings, doors being first shut, and after two hours the stupefied mosquitoes were brushed out and burned. Notwithstanding these measures, no practical results were obtained, as the admission rates gradually increased towards the end of the year. A slight amount of malaria of a mild type is also reported amongst the children of native followers; all these cases attended the Cantonment hospital, and were amenable to quinine. Prophylactic issues of quinine was given to European troops, at first twice weekly, and afterwards daily. "Punkah" coolies are reported as a grave source of infection, they were all malarious, and should never be employed, if possible, when suffering from enlarged spleen or other indication of malaria. It was also thought that there was a considerable amount of malaria imported into the station by the Gordon Highlanders, who contracted the disease on the march from Murree to Rawal Pindi, whence they carried it to Amritsar. The 1st South Wales Borderers were also infected with malaria in Mian Mir, and this regiment relieved the Gordon Highlanders. There were no fatal cases. The third highest admission rate was 1,005·9 per 1,000 at Mian Mir, compared with 269·5 in 1902. This very great increase is all the more remarkable in that the decrease in the admission rate for malaria at this station, in 1902, was far greater than in any other cantonment in India, and at the time was erroneously attributed to the anti-malarial operations instituted by the Royal Society, and carried out in co-operation with the Government of India. The history and results of this campaign are summarized by the Sanitary Commissioner with the Government of India in his report for 1902, pages 103–107. It will be seen that the operations were a failure, as it is impossible to control the breeding places of mosquitoes as long as canal water is allowed to remain in a stagnant state in miles of narrow deep ditches, whose banks are for

the most part lined with rank vegetation. To control the prevalence of malarial fevers in such stations as Mian Mir it would be necessary to distribute irrigation water by means of pipes and fill up existing ditches, or abolish irrigation altogether; the former proposal is too costly, and the latter would mean starvation to the "zemindars." A careful perusal of a summary of the condition of affairs as regards the general character and incidence of malaria among British troops in Mian Mir in 1903 will be of some interest. The admissions for ague numbered 846. It would appear that practically all cases of malaria were contracted locally. A certain number of men, however, in the 1st South Wales Borderers had previously suffered from malarial fever at Peshawar. The type of disease was, in the majority of cases, *benign tertian*, but a rather large number of cases of the malignant type came under treatment; there was no case of *quartan*. It is regretted that the exact numbers under the several types cannot be furnished, although the diagnosis was confirmed by microscopic examination in nearly all cases. There were a number of cases in which the "Peshawar" type was noticeable, violent vomiting, cramps, melæna, and great prostration. In the early part of the season *benign tertian* parasites were most general, but later on, *malignant tertian* increased. A marked increase in the incidence of malaria generally, was noted about the 15th September and increased up to the end of November, the monthly admissions being September 112, October 180, November 325, December 156. This excessive prevalence late in the year appears to have been due to a late and very heavy rainfall, which was followed by numerous stagnant puddles and breeding places for mosquitoes, as it was impossible for the water to drain away properly owing to imperfect drainage. *Anopheles* mosquitoes were found in the station during the hot weather months, they increased during the rains, becoming most prevalent between 1st September and 15th October, after which they gradually diminished, and were hardly to be found after 15th November. *Anopheles culicifacies* and *A. Rossii* were met with, the former from about the end of April and the latter during the rains. The *larvæ* of *A. culicifacies* were found chiefly in the canal cuttings, and it would appear that they not only bred locally but also were brought from long distances by the canal current. The *larvæ* of *A. Rossii* were found only in stagnant collections of rain water. Kerosine oil was used generally, as a larvicide. An active anti-malarial campaign was carried out during the year in the Royal Artillery barracks and their vicinity under the direction of Captain James, I.M.S., and Lieutenant Christophers, I.M.S., and while the prevalence of malarial fevers amongst the Artillery was checked in the early part of the season it was obvious that there was no material check later on. Evidence was found that there was also considerable *foci* of infection among the children of native followers in the Royal Artillery bazar. Quinine was administered as a prophylactic to European troops from 15th September to 15th November. It was given in 10-grain doses on two successive days every week, in the presence of a Medical Officer, the men parading in companies in their barracks. The results on the whole are reported as unsatisfactory and apparently in some cases most contradictory, as some men who took quinine apparently suffered more than others who took none. It was difficult to get men together and after a little time some tried to evade the dose. Hypodermic administration of quinine to malarial patients in hospital was found to be very satisfactory. Beyond this and quinine by the mouth no other special treatment was adopted in hospital. Three deaths from malaria occurred at Mian Mir during the year, in all, careful *post-mortem* examinations were held. The first died with cerebral symptoms, the brain weighed 49½ ozs., there was a general prominence of the right cerebral hemisphere, empty veins, and general anæmia of the brain tissue, increase of cerebral lymph and adhesions between dura and arachnoid mater, liver enlarged weighing 76 ozs., spleen small and firm, weight only 6 ozs. The second case died of cardiac syncope due to fatty degeneration and final cardiac thrombosis, aided by profuse pericardial effusion; spleen weighed 21 ozs. The third case also died of cardiac syncope, the direct result of shock caused by a hypodermic injection of quinine. The heart was large and flabby, it weighed 12 ozs., valves

India.

normal, liver enlarged and congested, weighing 66 ozs., spleen greatly enlarged and congested weighing 24 ozs. No doubt the condition of these organs largely contributed to the fatal termination of this case.

Bombay Command.—The highest admission ratio for malarial fevers in this Command occurred at Sitabaldi, it being 938·5 per 1,000 as compared with 300·0 in the preceding year. This increase is stated to be due to importation from Kamptee which furnished the monthly detachment reliefs. The majority of the men comprising these reliefs had suffered from malaria at Kamptee. On arrival at Sitabaldi the improvement made by malaria cases was very marked. The type of fever most prevalent was *mild tertian*, and the majority of the admissions occurred from September to the end of the year. No *anopheles* or their *larvæ* was found in or about the fort, but every precaution was taken to avoid collections of water which would favour the breeding of mosquitoes. No children of native followers live in close proximity to either barracks or hospital. Quinine as a prophylactic was issued with beneficial results in 10-grain doses twice daily for one week to all fresh arrivals who had malaria previously, and to all others, including patients in hospital, twice a week. Deesa which had the highest malarial incidence for 1902 in the Bombay Command comes second in 1903 with an admission ratio of 738·3 per 1,000 as compared with 897·1 in 1902. Of 237 cases, 175 were diagnosed as *benign tertian* and 65 *malignant tertian*. No cases of *quartan* type were met with. In one fatal case that occurred, the spleen weighed 1 lb. 4 ozs., and microscopic examination of the blood in the earlier stages of the disease had shown a few rings and crescents; latterly no parasites were found. Malaria was most prevalent in Deesa from September to the end of the year. Initial infection in the majority of cases occurred outside the station. *Anopheles* mosquitoes and their *larvæ* were met with, the latter in water "chatties" near the Commissariat hay stacks, and in a stream which ran from the battery swimming bath and also in other places, all of which were treated with kerosine oil. Quinine was issued as a prophylactic with beneficial results. Malarial patients were isolated and treated in wards by themselves; hypodermic injection of quinine was found to be of great value in some cases. Owing to scarcity of mosquito curtains all the windows and doors of the hospital were supplied with gauze. The third highest ratio was 719·2 per 1,000 at Nasirabad, an increase of 367·8 on the previous year's rate. The type here again was chiefly *benign tertian*, one fatal case of *malignant tertian* occurred, and no cases of *quartan* type were met with. Malaria was most prevalent in October and November. Initial infection occurred in the station in 253 cases, and elsewhere in 57 cases. Mosquitoes were prevalent, but the various species were not distinguished; anti-malarial measures were carried out in the station, catch pits, tanks, &c., were cleaned out regularly and surface drains kept clean; unused wells were covered and kerosine oil was placed in others. Fourteen children of native followers living in the "syces" lines, who were found to have enlarged spleens, were moved out into a small camp in July, and "syces" were only allowed in the battery lines between sunrise and sunset. Throughout the station quinine was issued as a prophylactic measure with unsatisfactory results; men in hospital were given quinine by mouth and hypodermically.

Bengal Command—The highest admission ratio in the command was 537·8 per 1,000 at Barrackpore as compared with 306·1 in 1902. Malarial fevers gave by far the greatest number of admissions to hospital during the year, the most prevalent type being *benign tertian*. No cases of either *quartan* or *malignant tertian* occurred. The disease was contracted in the station in the majority of cases, and was much prevalent from September to the end of the year, during which period *Anopheles Rossii* were very abundant. The anti-malarial measures adopted were kerosine oil applied to breeding places, salt solution to fire buckets, and the use of mosquito curtains in hospital. The effects of kerosine oil are reported as of negative character. The endemic index among children of native followers is stated to be 30 per cent. Supervised prophylactic administration of quinine was carried out amongst troops in barracks. Advice was also circulated as regards the changing of clothing when wet, the avoidance of chilly moist fogs when feeling hot, and the necessity of reporting sick when attacked.

The results, however, were not satisfactory. No fatal cases occurred. Roorki had the second highest admission rate, 478·8 per 1,000 against 159·4 in 1902. All cases were acquired in the station; the type of fever was chiefly *benign tertian* and was most prevalent in September and October. *Anopheles* and their *larvæ* were found along the Ganges canal which runs about 600 yards from barracks; they were also found in several gardens in the civil lines, and in two "jheels" between the station hospital and the canal and between the hospital and the railway. Kerosine oil was used in all fire tanks and buckets in barracks, and surroundings were kept well drained as far as possible, and where this was not possible kerosine was added to all puddles, &c. Rock salt solution was also used. No effect on the incidence of malaria was noticed from these measures. Quinine was issued twice weekly in 5-grain doses in the presence of a medical officer during the months of September, October and November. Quinine tabloids were issued experimentally to No. 91 Company Royal Garrison Artillery. They were placed in charge of a non-commissioned officer, and issued twice weekly to applicants whose names were registered by this officer. The experiment proved a failure as very few men volunteered, and the practice was stopped. Patients in hospital were treated by diaphoretic mixtures followed by quinine sulph. 5 grains *t.i.d.*, and the quinine was gradually diminished, so that on discharge from hospital the men were only getting a simple 5-grain dose daily. Amongst native troops it was noted that intramuscular injections of quinine were more beneficial than hypodermic, one case of local gangrene of the skin is noted as occurring from a hypodermic injection. The records also show that no great difference was observed between the results of treatment intramuscularly and by the mouth. No fatal cases occurred in the station from malaria during the year. The third highest admission ratio was 449·8 at Saugor as compared with 895·3 in 1902. The initial infection was in most cases contracted in the station as there were no fresh arrivals during the year.

Benign tertian and *quartan* were the most prevalent types of the disease met with, and the months of greatest incidence were from August to November inclusive. *Anopheles Rossii* were found, but it is noted there are undoubtedly other species prevalent in the station. All stagnant pools, &c. in cantonments were either filled up or treated with kerosine oil after the rains, as far as funds would permit. A daily issue of 5 grains of quinine was administered prophylactically in the presence of an officer to each man of the garrison from 1st August to the end of the year, with good results. In hospital, besides ordinary routine treatment, it is noted that bi-sulphate of quinine hypodermically gave excellent results in selected cases. No deaths from Malaria occurred among British troops.

Madras Command.—In this command, Belgaum had the highest admission ratio, it being 437·3 per 1,000 as compared with 192·0 in 1902. This marked increase of 245·3 per 1,000 is not due to importation, as no troops affected with malaria arrived in the station during the year. It is noted that nearly all the cases occurred in the station or its vicinity among men while out on shooting passes, and that a number of men are believed to contract malaria when visiting the bazar at night. *Benign tertian* was the most prevalent type of fever met with, and seasonal provalence is not marked. February, 43 cases; March, 42; June, 54; July, 65; October, 61; November, 41; were the months in which the greatest number of cases occurred.

Anopheles mosquitoes are stated to have been found, but the species was not determined. Kerosine oil was used in fire buckets, &c., and its effects were probably of little import. Apparently other prophylactic measures were undertaken. The endemic index among children of native followers living in close proximity to barracks was about 7 per cent. There were no deaths from malaria. The next highest admission ratio was 227·0 per 1,000 at Bellary as compared with 164·3 in 1902. Out of 134 cases, 108 were acquired in the station and 26 imported. The 25th Battery, Royal Field Artillery, had a large number of its men infected at Bangalore prior to arrival in Bellary *Benign tertian* was the type of disease met with, and January, November and December were the months of greatest prevalence. Practically no native children live in close proximity to the European barracks, the endemic index of those of native troops was estimated at 26 per cent. Small numbers of

India.

Anopheles Rossii were found in the cavalry lines in August, while the nearest *larvæ* found were one mile distant. Close and thorough mosquito investigations were carried out by Lieutenant-Colonel H. K. Allport, R.A.M.C., Quinine was issued prophylactically in 10-grain doses to all men posted on guard in the fort, which is infested with mosquitoes, with good results. All malarial patients in hospital were provided with mosquito nets and severe cases were isolated. No fatal cases occurred. The third highest admission rate for malaria in the Madras Command occurred at Secunderabad with 117·4 per 1,000 as compared with 111·5 in 1902. No troops infected with malaria arrived in the station during the year. The type of fever observed was entirely *benign tertian*. September, October and November were the months of greatest prevalence. *Anopheles Rossii* and *A. Stephenii* and their *larvæ* were found in many pools and collections of shallow water from 150 yards to half a mile from barracks, these were treated with kerosine oil and its use appeared to be beneficial. Malarial fever is common among the children of native followers living in the neighbourhood of barracks. Quinine was given in 10-grain doses twice weekly as a prophylactic during the fever season with beneficial effects. All malarial patients in hospital were provided with mosquito nets and the diagnosis confirmed by blood examination. In some cases among native troops quinine was administered hypodermically in 3 to 5-grain doses, the neutral bi-sulphate being used with very good results, few cases requiring more than two injections. It was found that there was less danger of suppuration or inflammation occurring at the seat of injection if the needle was introduced between the shoulder blades. Amongst European troops one death from malaria occurred, the spleen at the *post mortem* was found to weigh 20 ozs. and no parasites were detected microscopically, the liver was congested and weighed 80 ozs., the lower portion of the ilium was hyperæmic, with three or four irregularly shaped patches of more intense conjestion above the ileocæcal valve.

Burma District.—The highest admission ratio, 694·6 per 1,000, occurred at Bhamo. This station was not occupied by European troops in 1902, so no comparison as to annual incidence can be made. The type of fever was chiefly *benign tertian* (163 admissions), and a few cases (3) of *quartan* occurred, one of which proved fatal. No cases of *malignant tertian* were met with. June to September were the months of greatest prevalence. Quinine was issued as a prophylactic from July to October. Obstinate cases in hospital were treated by hypodermic injections of bihydrochlorate of quinine. *Anopheles* mosquitoes were found, but the species was not recognised. Kerosine oil was used as a larvicide in fire tanks and buckets in the lines. The second highest admission ratio was 509·7 per 1,000 at Maymyo, this is an increase of 335·2 on the previous year. The majority of the cases are stated as imported from outside the station. Men infected with malaria were constantly arriving from Mandalay. *Malignant tertian* was the most prevalent form of malaria met with, July, August, and September being the months of greatest incidence. The endemic index of the disease amongst the children of native followers living in close proximity to barracks or hospital was very high. Those living in the lines of British troops being 20 per cent., while the children in the lines of the Gurkha Rifles, whose blood was carefully examined, showed parasites in 60 per cent. of strength. Quinine was administered to the troops prophylactically, and while lessening the severity of attacks, did not, however, effect their frequency. A marsh in which *anopheles* bred two miles distant from the British lines was experimentally drained, and this apparently diminished the incidence of the disease. Men admitted to hospital for malaria were provided with mosquito curtains to prevent the spread of infection, and were treated with quinine either by mouth or hypodermically as circumstances required. Four different species of *anopheles* mosquitoes were met with. The third highest admission ratio in Burma occurred at Port Blair, 338·1 per 1,000 as compared with 226·3 in 1902, this being an increase of 111·8. Among 66 cases in which the blood of malarial patients was examined for parasites, the following positive results were obtained: *benign tertian* 10, *quartan* 11, *malignant tertian* 7, in 38 cases no parasites were found, but repeated examinations were not made in these cases. No particular form of fever was noticed to be exceptionally prevalent in any month, malarial fevers as

a whole, however, caused most admissions from March to June inclusive. There were no families of followers in Port Blair. *Anopheles* mosquitoes have not been found on Ross Island although careful search was made for them. The island is very well drained and there are no pools on it. Notwithstanding the absence of *anopheles* the *larvæ* of all other mosquitoes have been destroyed and mosquitoes diminished. It is unknown locally, whether the cases were fresh cases, or attacks that had originally been contracted elsewhere. No troops unduly infected with malaria arrived in the station during the year. But, as in the case of Mauritius, which was originally free from malaria and which is now full of it, importation from the mainland is probably the chief factor that had caused the present condition of affairs. *India.*

TABLES showing the admissions from malarial fevers at the various stations in India during 1903 :—

India.

Stations.	Strength.	Admissions.	Ratio per 1,000.
Fort William	1,314	193	146·9
„ Fulta	13	—	—
„ Chingrikhal	46	6	130·4
Dum Dum	314	91	289·8
Barrackpore	225	121	537·8
Darjeeling	369	81	219·5
Lebong	602	20	33·2
Allahabad	622	160	257·2
Fort Allahabad	186	51	274·2
Dinapore	563	149	264·7
Benares	192	55	286·5
Lucknow	2,471	256	103·6
„ Military Prison	25	4	160·0
Fyzabad	992	68	68·5
Sitapur	636	45	70·8
Fatehgarh	156	37	237·2
Cawnpore	988	198	200·4
Bareilly	1,255	138	110·0
Shahjahanpur	532	39	73·3
Ranikhet	1,207	147	121·8
Chaubuttia	474	14	29·5
Naini Tal	142	21	147·9
Jubbulpore	727	189	256·4
Saugor	229	103	449·8
Pachmarhi	128	22	171·9
Agra	1,105	425	384·6
Nowgong	286	57	199·3
Jhansi	956	299	312·8
Meerut	1,985	378	190·4
Muttra	532	147	276·3
Delhi	298	126	422·8
Roorki	330	158	478·8
Chakrata	1,053	156	148·1
Landour	183	52	284·2
Marching	716	196	273·7
Total—Bengal Command ..	21,862	4,202	192·2

Stations.	Strength.	Admissions.	Ratio per 1,000.
Umballa	2,164	527	243·5
Dagshai	633	141	222·7
Solon	215	25	116·3
Subathu	368	35	95·1
Jutogh	237	15	63·3
Kasauli	386	61	158·0
Mian Mir	843	848	1,005·9
Jullundur	491	106	215·9
Ferozepore	864	480	555·6
Fort Lahore	112	124	1,107·1
Amritsar	181	191	1,055·2
Multan	825	195	236·4
Dalhousie	899	231	257·0
Rawal Pindi	2,560	863	337·1
Sialkot	1,195	212	177·4
Campbellpore	229	61	266·4
Khyra Gali	48	10	208·3
Bara Gali	52	2	38·5
Kuldana	505	13	184·2
Kalabagh	53	11	207·5
Camp Gharial	277	14	50·5
„ Thobba	447	21	47·0
„ Upper Topa	238	16	67·2
„ Lower Topa	106	8	75·5
„ Khanspur	465	46	98·9
Murree	128	7	54·7
Peshawar	1,625	933	574·2
Nowshera	653	179	274·1
Cherat	329	6	18·2
Fort Attock	224	28	125·0
Marching	645	214	331·8
Total—Punjab Command ..	17,997	5,703	316·9

India.

Stations.	Strength.	Admissions.	Ratio per 1,000.
Madras	522	17	32·6
St. Thomas's Mount	308	12	39·0
Trichinopoly (Boer Camp)	36	4	111·1
Poonamallee	141	5	35·5
Wellington	1,091	104	95·3
Cannanore	106	5	47·2
Calicut	92	2	21·7
Malapuram	140	2	14·3
Bangalore	2,196	193	87·9
Belgaum	1,100	481	437·3
Bellary	511	116	227·0
Ramandroog	10	1	100·0
Secunderabad	3,084	362	117·4
Marching	38	—	—
Total—Madras Command ..	9,375	1,304	139·1
Rangoon	836	239	285·9
Port Blair	139	47	338·1
Thayetmyo	607	79	130·1
Maymyo	155	79	509·7
Meiktila	404	6	14·9
Mandalay	666	133	199·7
Shwebo	492	36	73·2
Bhamo	289	166	694·6
Marching	79	22	278·5
Total—Burma District	3,617	807	223·1

Stations.	Strength.	Admissions.	Ratio per 1,000.
Poona	2,353	370	157·2
Ahmednagar	910	139	152·7
Kirkee	762	126	165·4
Satara	100	3	30·0
Purandhur	139	16	115·1
Mhow	1,561	705	451·6
Nasirabad	673	484	719·2
Neemuch	293	193	658·7
Indore	114	36	315·8
Taragarh	44	9	204·5
Bombay	1,333	205	153·8
Deolali	822	150	182·5
Khandalla	44	21	477·3
Deesa	321	237	738·3
Ahmedabad	255	135	529·4
Mount Abu	121	75	619·8
Aden	931	610	655·2
Karachi	1,154	445	385·6
Hyderabad	483	214	443·1
Kamptee	921	439	476·7
Sitabaldi	65	61	938·5
Quetta	2,447	246	100·5
Marching	142	36	253·5
Total—Bombay Command ..	15,988	4,955	309·9
Delhi Coronation Durbar and Manœuvres	774	66	85·3
Total—India	69,613	17,037	244·7

ndia.

Septic Diseases.—There were 73 admissions with 7 deaths, the latter including 2 invalids who had left the Command, as compared with 66 admissions and 7 deaths in 1902. These were 69 from erysipelas, 2 from septicæmia, and 1 each from sloughing phagedæna and pyæmia. Three of the deaths were due to septicæmia and 2 to erysipelas. The admission rate like that of 1902 was 1·1, against the decennial average rate of 1·3. The mortality ratio was ·10 against ·12 and ·10 the previous year's and the decennial average rates respectively. The average number of men constantly sick was 4·61 giving a ratio of ·07 as against ·09, both the previous year's and the decennial average rates. The districts contributing the largest admission rates were Rawal Pindi 3·5, Mhow 2·2, Narbudda 1·8, Quetta 1·6, Peshawar and Poona 1·4 each, Allahabad 1·3, Lahore 1·2, Rohilkhand and Meerut 1·1 each, and Rangoon 1·0. Of the deaths from erysipelas 1 each occurred at Cawnpore and Naini Tal, and of those from septicæmia 2 occurred at Mhow and 1 (out of hospital) at Bombay. The two invalids died from pyæmia and septicæmia respectively.

Tubercular Diseases.—There were 265 admissions with 27 deaths (including 4 among invalids who had left the Command) and an average number of men constantly sick of 58·58. The admission rate, like that in 1902, was 3·8 against 4·3 the decennial average rate; whereas the death and the constantly sick rates were ·39 and ·84 per 1,000, as compared with ·86 and ·65 respectively in 1902, and ·83 and ·74, the corresponding average rates for the preceding ten years. 238 admissions and 21 deaths (including 4 invalids) were due to tubercle of the lungs, 1 to tubercle of the membranes of the brain and 1 of the brain, both of which ended fatally, 3 to that of intestines with 2 deaths, and 14 of joints of which 2 were fatal. The Bombay district again furnished the highest admission rate (26·4) during the year 1903, giving an increase of 6·6 on the preceding year. Fifty out of 58 admissions in this district occurred at Deolali. Next comes the Southern district with an admission rate of 10·5 showing an increase of 8·8 on the preceding year, which was the highest of all increases during the year. Other instances of high admission rate, next to these, were 5·2 in the Lahore district, 4·7 in the Poona district, 4·6 in the Narbudda district, 4·4 in the Rohilkhand district, and 4·1 in the Rangoon district. Besides the Southern and Bombay districts 9 other districts furnished inc reased admission rates ranging from 3·5 to ·1 on the last year: whereas 14 districts out of 26 had decreased admission rates in 1903, the largest being 5·4 in the Aden district. It is worth mentioning that in 1902 Aden district was second in the list of highest admission rates, whereas in 1903 it had the lowest admission rate except Belgaum district. Of 23 deaths in India, 4 oc curred in the Bombay, 3 each in the Lahore and Poona, 2 each in the Oudh, Bundelkhand, and Meerut, and 1 each in the Presidency, Rohilkhand, Narbudda, Sirhind, Madras, Mandalay, and Nagpur districts.

Venereal Diseases.—For *primary syphilis* there were 2,334 admissions giving a ratio of 33·5 per 1,000, which is lower than in 1902 by 1·7, and by 70·9 than the decennial average rate. The average number of men constantly sick from the disease was 231·05, being in the ratio of 3·32 per 1,000, which is lower than in the preceding year by ·16 and than the decennial average rate by 6·28. *Soft chancre* caused 4,334 admissions with an average of 407·26 men constantly sick. The admission ratio, 62·3 per 1,000, is lower than in the previous year by 9·6 and by 9·1 than the decennial average rate; and the constantly sick ratio, 5·85 per 1,000, is also lower than in the preceding year by ·19, but higher than the decennial average rate by ·09. The combined figures of primary syphilis and soft chancre give a total of 6,668 admissions and 638·31 as average number constantly sick for primary venereal sores. The corresponding ratios per 1,000, 95·8 and 9·17, show decreases of 11·2 and ·35 respectively as compared with 1902 and of 80·0 and 6·18 respectively in comparison with the ten years' rate. *Secondary syphilis* caused 3,248 admissions and 12 deaths (2 of which occurred in invalids who had left the Command), the average number constantly sick being 350·66. The admission ratio, 46·7, is lower than in the preceding year by 3·2, and the constantly sick ratio, 5·04, is higher than in 1902 by ·19, while both of the ratios are lower by 29·6 and 2·97 respectively than the corresponding

decennial average rates. The death rate ·17 shows decreases of ·23 and ·06 on the previous year's and the decennial average rates. *Gonorrhœa* caused 7,456 admissions giving a ratio of 107·1 per 1,000, and the average number of men constantly sick was 578·72 with a ratio of 8·31 per 1,000. Both the admission and constantly sick ratios show decreases of 17·4 and ·96 per 1,000 respectively as compared with the figures for 1902, and 52·4 and 4·03 compared with the corresponding decennial average rates. For all forms of venereal disease there were 17,372 admissions as compared with 17,036 in 1902, 16,789 in 1901, 18,049 in 1900, and 21,217 in 1899. The total admission ratio was 249·5 per 1,000, lower than in 1902 by 31·9 and by 162·0 than the decennial average rate. The average number of men constantly sick was 1567·69 compared with 1430·84 for the preceding year. The ratio per 1,000 was 22·52 being lower than in the preceding year by 1·11 and by 13·17 than the decennial average rate.* *India.*

There has been a large decrease in venereal disease since 1899, but in 1902 there was a slight increase over 1901, though not so high as that in 1900. The following table shows the admission rates per 1,000 of strength from 1897 :—

Year.	Admission Ratios per 1,000.	Year.	Admission Ratios per 1,000.
1897	507·8	1900	298·0
1898	371·4	1901	276·0
1899	313·5	1902	281·4
		1903	249·5

It will be seen from what has been stated before that the decrease in venereal disease in 1903 is ascribed to the fall of all forms of the disease. Sixty-five stations out of 107 contributed to this fall while only 37 stations had an increased ratio over the previous year. Thirty stations had decreases over 100, while only 7 show increases above 100. The average stay of each case in hospital was 32·94 days as compared with 30·66 in 1902, and the total loss of service was 572,207 days against 522,257 in 1902, and 516,855 days in 1901, although the average sick time to each soldier for the affection in 1903 was lower than the two previous years.

The return to the steady annual decrease in the admission rates for venereal disease which commenced in 1896 is satisfactory. Last year, it may be remembered, there was a slight increase. Notwithstanding however a reduction of 31·9 per 1,000 of strength, it is still to be deplored that such a very large amount of preventible disease as an admission ratio of 249·5 per 1,000 due to venereal still exists. This enormous wastage of otherwise efficient troope is a subject that is engaging our closest possible attention, and General, Commanding, Regimental, and Medical Officers are strenuously working in consort by every means in their power to reduce it. Reports by Medical Officers in the Command mention the following causes for the prevalence of venereal disease.

1. The youthful inexperience of the soldier, and the large number of such young soldiers in the country.
2. The inability to control prostitution outside cantonment limits. Prostitutes ply their trade in the jungle during the day, and loiter about cantonments after dark

* There were 96 admissions for ulcer of penis of non-venereal origin, with 6·11 men constantly sick. If, as in former years (prior to 1897), these cases were included with those of primary syphilis and soft chancre under the heading of primary venereal sores, the admission and constantly sick rates for all venereal diseases would equal 250·9 and 22·61 respectively.

India.

3. The non-appreciation of the soldier of the terrible ravages of venereal disease.
4. The large number of cases contracted on the line of march between stations.

During the year, as before noted, strenuous efforts have been made to prevent the contraction and spread of venereal disease. The moral tone of the troops has been taken in hand by their officers. Athletics and games have been encouraged, and every inducement offered in the shape of home comforts to induce the men to spend their evenings in barracks; institutes, coffee and recreation rooms with all the comforts of club life are receiving close attention of the authorities, billiard tables are being provided by the State, and closest possible sympathy in all forms of barrack amusements is exercised by Commanding, Company, and Medical Officers. The sale of intoxicant liquors is prohibited until sunset with the exception of one pint of beer at dinner time, and canteens are limited in the time they are allowed to supply beer in the evenings, and in the amount of liquor supplied to individuals. Special ablution rooms have been established in barracks and the cantonment code is being rigidly enforced. Venereal disease when it occurs is placed under the closest possible observation and treatment and intramuscular injections of mercury are almost universally adopted in all cases of syphilis, thereby reducing invaliding from this cause to a very considerable extent. With regard to the prevalence of venereal diseases in the different arms of the service, it is noted that the cavalry had an admission ratio of 221·2 per 1,000, as compared with 318·2 in 1902, thus showing a decrease of 97·0, the artillery 241·7 per 1,000 against 277·0, showing a decrease of 35·3, and the infantry an admission ratio of 269·4 per 1,000, against 292·0 in 1902, showing a decrease of 22·6.

The following table shows the admission and the constantly sick rates per 1,000 by Commands as compared with the figures for the previous year. During the year 1903, all the Commands except Burma district and Madras had decreased rates for constantly sick :—

Commands.	1902.		1903.		Increase.		Decrease.	
	Admission Rate.	Constantly Sick Rate.	Admission Rate.	Constantly Sick Rate.	Admission.	Constantly Sick.	Admission.	Constantly Sick.
Bengal	299·4	25·95	251·1	22·46	—	—	48·3	3·49
Punjab	217·5	19·23	176·1	17·32	—	—	41·4	1·91
Madras	348·7	29·33	334·7	32·90	—	3·57	14·0	—
Burma District ..	328·5	26·09	346·2	31·43	17·7	5·34	—	—
Bombay	286·7	24·04	259·6	21·28	—	—	27·1	2·76
India	281·4	23·63	249·5	22·52	—	—	31·9	1·11

Comparing next the prevalence of syphilis and gonorrhœa in the different districts, the Secunderabad district had the highest admission ratio for primary syphilis, 132·0 per 1,000, an increase of 59·3 on the preceding year's rate. The second highest ratio was 94·1 in the Bombay district, giving an increase of 22·3. Next come the Southern district with a ratio of 61·6, an increase of 37·7, and the Rangoon district, with a ratio of 61·5, an increase of 50·0. Other notable instances of increased admission rate were Aden (21·9), Rohilkhand (17·8), and Poona (15·3), besides four more districts where the increases were inconsiderable. The largest decrease

(58·9) is noticed in the Nagpur district, which had the highest admission rate during 1902 (95·4). There is a great reduction of secondary syphilis also in this district, showing 44·6 against 68·0 in the previous year. Next to Nagpur, the Belgaum and Meerut districts had also large decreases, the former showing 43·8 and the latter 32·9. The total number of districts showing decreases was 15, against 11 having increases in the disease. The lowest admission ratios for primary syphilis were 4·1 per 1,000 in the Quetta district, showing a decrease of 3·6, Peshawar 7·4, with a decrease of 2·5, and Bundelkhand district 9·4, with a decrease of 14·0.

For secondary syphilis, the Rangoon district had the highest admission ratio, 105·6 per 1,000, an increase of 26·1 on the preceding year's rate. Next comes the Southern district, with a ratio of 86·8 per 1,000, showing an increase of 26·6, after which the Bangalore district appears with 77·4 per 1,000, an increase of 20·0. Besides the above, Mandalay district (74·9), Belgaum district (72·2), Bombay district (70·9), Deesa district (70·3), Secunderabad district (69·4), Presidency district (66·3), Lahore district (61·2), also show a high admission rate. As in 1902, the Quetta district had the lowest admission rate (21·3), showing this year a decrease of 4·4. Similarly, the next lowest ratio was 21·9 in the Peshawar district, with a decrease of 9·5, following which the Oudh district comes as third, and the Sind district fourth in the list, showing decreases of 11·1 and 29·0 respectively as compared with the preceding year. Like primary syphilis, secondary syphilis had also decreased admission rate in more districts than for the increased rates in 1902, the former showing 14 against 12 for the latter. The largest increase was 26·6 in the Southern district, while the highest decrease was 36·5 in the Mhow district. Gonorrhœa was most prevalent in the Rangoon district, the admission ratio being 218·5 per 1,000, an increase of 73·9 on the previous year's rate. The second highest ratio was 167·2 per 1,000 in the Poona district, an increase of 4·9. The next highest ratios were 148·3 in the Bundelkhand district, 143·6 in the Presidency district, 142·7 in the Allahabad district, and 141·3 in the Belgaum district, all of which show lower admission rates compared with the previous year. The lowest admission ratios were 41·3 in the Peshawar district, and 51·9 in the Quetta district, both of which show considerable decrease in the admission rate compared with the previous year. It will be seen from the above that the Quetta and Peshawar districts had lowest admission rates for all forms of venereal disease in 1903. The Quetta district had lowest admission rates for venereal disease in 1902 also. Here, again, gonorrhœa had also decreased admission rates in 21 districts against only 5 for the increased rates. The largest increase was 73·9 in the Rangoon district, while in the other four districts the increases are too insignificant to mention here. For the decreased rates, Deesa stands first in the list of all increases and decreases, showing 66·0 in 1903 against 181·1 in 1902, the decrease being 115·1, to which is added 55·6 in the Rohilkhand, 53·2 in the Peshawar, and 51·1 in the Secunderabad districts.

Coming next to the prevalence of the disease by individual stations, it is found that the highest admission ratio was 660·0 per 1,000 at Satara, an increase of 341·5. Next comes Rangoon with a ratio of 576·6, an increase of 94·8; Cannanore 566·0, a decrease of 123·2; Camp Gharial 491·0, an increase of 303·2; Taragarh 477·3, a decrease of 46·5; Fort William 446·7, a decrease of 63·4; Bellary 446·2, an increase of 122·3. It has been noted before that individual stations had more decreases than increases in 1903. The highest admission rate in 1902 was 689·2 at Cannanore, but in 1903 the highest rate was 660·0 at Satara. The number of stations having increases over 100 and also the number having decreases over 100 have been stated before. Those having increases and decreases above 200 are given below :—

Increases.—Satara 341·5, Camp Gharial 303·2.

Decreases.—Lower Topa 304·9, Deesa 251·4, Fyzabad 222·1, Fort Attock 214·9, and Muttra 200·2.

In 19 stations, as compared with 26 in the preceding year, the admission ratio for primary venereal sores was over 150 per 1,000, while 17 more had an admission ratio of over 100 per 1,000. The highest ratios were 370·0 at Satart (strength 100); 273·6 at Cannanore (strength 106); 252·7 at Camp Gharial (strength 277); 227·3 at Taragarh (strength 44); 224·9 at Rangoon

India. (strength 836), and 219·9 at Fort William (Calcutta) (strength 1,314). The admission ratio for secondary syphilis was over 100 per 1,000 at 10 stations against 14 in 1902, while in 13 other stations the ratio was over 75 per 1,000. The highest admission ratios being 121·7 at Deolali (strength 822); 120·8 at Rangoon (strength 836); 120·0 at Satara (strength 100); 119·6 at Lebong (strength 602). The highest admission ratios for gonorrhœa were 250·0 each at Benares (strength 192) and Calicut (strength 92); 230·9 at Rangoon (strength 836); 226·4 at Cannanore (strength 106); 211·5 at Fatehgarh (strength 156), and 207·0 at Poona (strength 2,353).

Hydrophobia.—There was one fatal case at Rawal Pindi. In this case the patient, a private in the 1st Wiltshire Regiment, was admitted to hospital on 4th August complaining of spasmodic pain in the epigastric region, and at the time gave no history of dog-bite. During the night he became restless and hysterical, and special orderlies were placed in charge of him. The spasms increased, and as the patient evinced great thirst, the medical officer in charge of the case suspected hydrophobia. During the night the patient rallied and the attack passed off, and when conscious he denied ever having been bitten by a dog or any other animal. The following morning, patient had a recurrence of his symptoms and became seriously ill, lying unconscious with dilated pupils, frothing from the mouth and his pulse was almost imperceptible. Notwithstanding every possible medical aid he never rallied and died at 7 a.m. A portion of the patient's brain sent to Kasauli for inoculation gave a negative result. After his death a searching inquiry was instigated, and it was ascertained that the deceased had been bitten by a dog close to one of his eyes early in the previous May, only one tooth penetrated and the wound inflamed slightly; the patient did not report sick or obtain medical treatment. There was some suspicion at the time about the dog and it was shot.

During the year the Pasteur Institute at Kasauli, under the charge of Lieut.-Col. D. Semple, M.D., R.A.M.C., has continued its good work. 161 patients connected with the British troops in India were treated in the Institute; comprising, 24 officers, 5 officers' wives, 1 officer's child, 7 warrant officers, 115 non-commissioned officers and men, 1 soldier's wife, and 8 soldiers' children. Of the 161 patients, 36 were bitten by animals proved to have had rabies, 16 by animals certified by a veterinary surgeon to have had rabies, and 109 by animals suspected of rabies. Not a single one of these cases developed hydrophobia.

It will be observed from the foregoing figures that the work of the Pasteur Institute at Kasauli is increasing and that it has met a want which has long been felt in India. The results clearly prove that the Institute is worked on a sound and scientific basis, and has more than justified its establishment.

Parasitic Diseases.—There were 1,263 admissions, including 389 from scabies, 343 from ringworm, 318 from bilharzia hæmatobia, 167 from tænia solium, 21 from phthirius inguinalis and 8 from tinea versicolor, giving a ratio of 18·1 per 1,000, as compared with 14·3 in the preceding year and 10·6 the decennial average rate. The increase is due to the prevalence of bilharzia hæmatobia during the year over the last year when only 51 cases had occurred. Out of 318 cases Bombay returned 179, Madras and Burma 68, Bengal 45, and Punjab 26 cases. In Bombay Command 126 out of 179 occurred at Deolali and 27 at Mhow. In Bengal Command 35 out of 45 occurred at Fort William. The highest admission ratio for all forms of parasitic disease, 71·4 per 1,000, occurred in the Bombay district, and shows an increase of 63·7 on the previous year's rate. The next highest ratios were 65·6 in the Rangoon and 59·1 in the Aden districts, both of which show increases of 51·2 and 32·0 respectively, over the last year. The lowest ratios were 3·5 in the Peshawar, 3·8 in the Bundelkhand, and 5·7 in the Quetta districts. The Sind district, which had the highest ratio in 1902, shows the largest decrease, 34·2, in this year. There was one death from bilharzia hæmatobia during the year at Murree. The man was transferred from Nowshera. On admission he was found much debilitated and suffering from severe vomiting, hæmaturia and tonsillitis. He died 9 days after the date of his admission.

Scurvy.—There were 5 cases of this disease, as compared with 10 in the preceding year, giving a ratio of ·1 per 1,000, against ·2 in the previous year, and ·3 the decennial average rate; 2 cases occurred at Mhow, and 1 each at Sitapur, Dalhousie, and Nasirabad.

Alcoholism.—There were 169 admissions, including 1 case of delirium tremens, with 4 deaths (1 out of hospital). The corresponding ratios, 2·4 and ·06 per 1,000, were lower by 2·0 and ·09 than in the previous year, and by 1·7 and ·03 respectively than the decennial average rates. The highest admission ratio was 7·5 per 1,000 in the Aden district, the same as in the last year, followed by 7·0 in the Southern district, showing an increase of 1·2. Next to these was 5·5 in the Bundelkhand district, showing also an increase of ·9. The lowest ratios were ·6 each in the Allahabad and Sind districts, against 4·0 and 21·2 respectively during 1902, the latter district furnishing the highest ratio in that year. Next to these comes ·8 in the Quetta district; all of these districts showing large decreases as compared with the previous year. There were other districts which had low admission rates this year, showing considerable decreases compared with the last year. The total number of districts showing decrease was 15, against 9 for increase. The largest decrease was 20·6 in the Sind district, whereas the largest increase was 2·2 in the Peshawar district.

Rheumatic Affections and Gout.—There were 1,105 admissions with 3 deaths (1 in an invalid who had left the Command) of which 35 admissions (2 fatal) were for rheumatic fever, 1,064 for rheumatism, 4 for gout, and 2 for osteo arthritis. The death of the invalid was due to rheumatic fever. The admission ratio, 15·9 is lower by 4·3 than in the previous year, and by 10·9 than the decennial average rate. The death rate was ·04 as compared with ·03 in 1902, and ·03 the decennial average rate. The average number of men constantly sick was 75·00, giving the ratio of 1·08 per 1,000, as against 1·40 and 1·96, the previous year's and the ten years' average rates respectively. The highest admission ratio was 25·4 per 1,000 in the Nagpur district, showing an increase of 14·9 on the previous year's rate. The next highest ratios were 22·1 in the Quetta district, a decrease of 11·7, 22·0 in the Sirhind district, a decrease of 3·4, 21·0 in the Narbudda district, an increase of 6·2, and 20·0 in the Bangalore district, an increase of 7·3. The lowest ratio was 7·9, in the Sind district, which occupied the same place in the preceding year, but showing this year an increase of 1·5. Next to this come 8·6 in the Mhow district, showing a decrease of 11·1, 10·0 in the Deesa district, a decrease of 8·3, 10·5 in the Southern district, a decrease of 23·3, and 10·8 in the Oudh district, a decrease of 1·4. Seventeen districts showed decreases, against 9 for increase. The largest decrease was 23·3, in the Southern district, and the largest increase 14·9, in the Nagpur district.

Debility.—There were 1,563 admissions and 2 deaths. The admission ratio, 22·5 per 1,000, is 4·6 lower than in the previous year, and 1·3 higher than the decennial average rate. There were 110·10 men constantly inefficient from this cause, being in the ratio of 1·58 per 1,000, compared with 1·83 in 1902, and 1·48 the decennial average rate. The highest admission ratios were 72·4 in the Peshawar district, an increase of 43·8 (the largest increase in the disease), 46·4 in the Bundelkhand district, an increase of 32·2, 43·4 in the Southern district, an increase of 1·3. The lowest ratios were 9·4 in the Secunderabad district, a decrease of 9·8, 11·3 in the Rangoon district, an increase of 2·7, and 11·4 in the Bangalore district, an increase of 5·4.

Other General Diseases caused 462 admissions and 20 deaths, 4 of which occurred in invalids who had left the Command, the equivalent ratios being 6·6 and ·29 per 1,000, as compared with 6·9 and ·18 in the previous year, and 7·4 and ·16 the decennial average rates. The admissions included 316, with 5 deaths, for new growths (wart 252, fibroma 22, papilloma 18, lipoma 7, and carcinoma 5, all fatal, non-malignant new growth not defined 4, myxoma 2, and 1 each of pterygium, osteoma myoma, neuroma, columnar papilloma, and adenoma); 34 for cyst, of which 2 were fatal; 26 for beri-beri, of which 6 were fatal; 26 for anæmia; 22 for congenital malformation; 13 for epidemic diarrhœa; 7 for mumps; 5 for diabetes mellitus, of which 1 terminated fatally; 4 for idiopathic anæmia; 2 each for choleraic diarrhœa,

India.

tetanus, and purpura, of which 1 case each of choleraic diarrhœa and tetanus ended fatally; and 1 each for leucocythæmia, diabetes insipidus, and hæmophilia. One case of choleraic diarrhœa occurred at Fyzabad, which terminated fatally, and 1 at Taragarh. All the cases of epidemic diarrhœa occurred in "K" Battery, Royal Horse Artillery, at Sialkot; owing to an outbreak of cholera in the cantonment, the troops moved to the Sanitary Camp, where 4 cases of cholera and 13 cases of epidemic diarrhœa occurred. Of the 26 cases of beri-beri, 9, with 3 deaths, occurred at Thayetmyo, 9, with 2 deaths, at Aden, 4 at Poona, 1 each at Wellington, Belgaum, Rangoon, and Deolali, of which the case at Belgaum was fatal. The 5 cases of carcinoma occurred at Dum Dum, Dinapore, Chaubuttia, Cherat, and Secunderabad, all terminated fatally. The deaths of invalids were due to beri-beri, cyst, malignant new growth, and Hodgkin's disease.

LOCAL DISEASES.—*Diseases of the Nervous System.*—There were 685 admissions and 21 deaths, including 1 in an invalid who had left the Command, giving ratios of 9·8 and ·30 per 1,000 as compared with 11·3 and ·38 in the previous year, and 8·9 and ·34 the decennial average rates.

Mental diseases caused 101 of the admissions, with 2 deaths, and an average number of 25·74 men constantly inefficient, the equivalent ratios being 1·5, the same as in the last year, ·03 and ·37 per 1,000 respectively. In 1902 the death ratio was ·03 and the constantly sick ratio ·48, while the corresponding decennial average rates were 1·4, ·03 and ·41 respectively. The two deaths were, from melancholia at Agra and from dementia at Bombay. The highest admission ratio for mental disorders was 4·3 per 1,000 in the Aden district, followed by 3·1 in the Sind district. There were no admissions in the Rohilkhand and Bangalore districts. Among the other districts the lowest admission ratios were ·5 in the Sirhind district, ·6 in the Secunderabad district, and ·7 each in Poona and Mhow districts. The admissions comprised melancholia 55, mania 18, delusional insanity 16, dementia 10, and mental stupor 2.

Excluding mental diseases there were 584 admissions for nervous affections and 19 deaths (including that of the invalid) with an average number constantly sick of 36·05, the equivalent ratios being 8·4, ·27 and ·52. In the preceding year the admission ratio was 9·8, the death rate ·35 and the constantly sick ratio ·77, and the corresponding decennial average rates are 7·5, ·31 and ·56 respectively. As in the previous year the Aden district had the highest admission ratio 44·0 per 1,000, showing a decrease of 6·4 as compared with 1902. The next highest ratio was 26·8 in the Bombay district, a decrease of 8·5. Besides the above the Rangoon district had also a high admission rate, 17·4, showing an increase of 11·7 over the last year. The lowest ratios were 3·0 in the Nagpur district, a decrease of 8·8; 3·7 in the Narbudda district, a decrease of 3·7, and 3·8 in the Allahabad district, a decrease of 2·4. The chief causes of admissions were 257 neuralgia, 95 epilepsy, 54 multiple neuritis, 47 headache (including 4 of megrim), 23 vertigo, 22 nervous weakness, 19 diseases of the brain, 14 degeneration of spinal cord, 10 neuritis and 8 hysteria. The 18 deaths in the Command were 2 in the Presidency district (1 multiple neuritis, 1 cerebral pachymeningitis); 2 in the Oudh district (1 abscess of the brain, 1 sanguineous apoplexy), 1 in the Narbudda (sanguineous apoplexy), 2 in the Meerut (1 hæmorrhage into the membranes of the brain, 1 epilepsy); 1 in the Lahore (sanguineous apoplexy), 2 in the Rawal Pindi (1 sanguineous apoplexy, 1 hemiplegia), 1 in the Rangoon (abscess of the brain), 1 in the Poona (congestion of the brain), 1 in the Mhow (posterior sclerosis), 1 in the Quetta districts (cerebral leptomeningitis), 1 at the Delhi Coronation Durbar and manœuvres (sanguineous apoplexy) and 3 amongst men on the line of march (2 cerebral meningitis and 1 epilepsy). The invalid died from primary lateral sclerosis.

Diseases of the Eye.—There were 708 admissions, giving a ratio of 10·2 per 1,000, being lower by ·2 than 1902, and by ·6 than the decennial average rate. There were 44·67 men, constantly sick from these diseases, being in the ratio of ·64 per 1,000, the same as in the previous year, but lower by ·03 than the decennial average rate. The highest admission ratio was 19·3 per 1,000 in the Nagpur district, an increase of 8·8 on the rate for the preceding year.

The next highest ratios were 17·2 in the Aden district, a decrease of ·5; 16·4 in Mhow district, a decrease of 3·9; and 15·4 in the Belgaum district, an increase of 4·5. The lowest ratios were 4·2 in the Peshawar district, a decrease of 3·7; 5·0 in the Bombay district, a decrease of 3·2; and 5·7 in the Deesa district, a decrease of 2·6. The chief causes of admission were, conjunctivitis 393, iritis 81, keratitis 54 (including 42 of ulcerative keratitis), myopia 35, hypermetropia 26, astigmatism 17, stye 15 and optic neuritis 10. *India.*

Diseases of Other Organs of Special Sense.—Under this heading there were 1,105 admissions with 1 death and an average number of 55·89 men constantly sick. The admission and constantly sick ratios were 15·9 and ·80 against 14·2 and ·82 in the preceding year, and 14·6 and ·82 the corresponding decennial average rates. There were no deaths under this head in the last year. The highest admission rate was 34·0 per 1,000 in the Madras district, an increase of 12·0. The next highest ratios were 29·7 in the Rangoon district, an increase of 19·2, and 27·4 in the Nagpur district, an increase of 6·5, 26·9 in the Allahabad district, an increase of 4·8, and 26·0 in the Bundelkhand district, with an increase of 1·1. The lowest admission rates were 4·3 in the Deesa district, a decrease of 9·0, 7·3 in the Sind district, a decrease of 26·2, and 9·0 in the Quetta district, an increase of 2·6. The Sind district, which had the highest place in last year's comparisons, has come down to the last place but one this year. Of the 1,105 admissions, 33 were for diseases of the nose, including 14 for epistaxis, 7 for coryza, and 4 for rhinitis. Diseases of the ear caused 1,072 admissions, of which 743 were from inflammation and 15 from abscess of the external ear, and 112 from inflammation and 25 from abscess of the middle ear. Besides these, there were 134 cases of perforation of the membrana tympani and 30 of deafness. The death occurred at Dinapore from suppurative inflammation of the middle ear.

Diseases of the Circulatory System.—There were 1,113 admissions and 57 deaths (3 of the latter occurring in invalids), giving ratios of 16·0 and ·82, as compared with 16·5 and 1·04, the admission and mortality ratios in 1902, and 11·2 and ·58 the corresponding decennial average rates. The average number of men constantly sick was 108·84, the equivalent ratio being 1·57 per 1,000, as compared with 1·58 and 1·15, the preceding year's and the decennial average rates. The highest admission ratio occurred, like last year, in the Aden district, 66·6 per 1,000, showing this year a decrease of 5·3. This station returned also this year a very large number of admissions from disordered action of the heart, showing 49 against 59 in the last year. The proportion of admissions from circulatory diseases was over 4 per cent. to the total from all causes to which no other districts can compare. The next highest ratio was 35·5 in the Bombay district, an increase of 4·1, followed by 33·6 in the Southern district, an increase of 5·5. The lowest admission ratios were 5·7 in the Oudh district, a decrease of 4·9; 6·2 in the Rangoon district, a decrease of ·5; 8·2 in the Narbudda district, an increase of 1·9; and 9·7 in the Presidency district, an increase of 1·5. The highest mortality ratio was 2·45 per 1,000 in the Quetta district, showing an increase of ·31 over the previous year; the next highest being 1·70 in the Bundelkhand district, an increase of ·68. The Sind and Nagpur districts, which occupied the first and second places in last year's comparisons, have returned no deaths this year. The Aden district shows in comparison with admission rate a considerable reduction in the death rate; the decrease being the largest except the above two districts. To the total number of admissions from this system, disordered action of heart contributed 643, valvular disease of the heart 262, varix 85, phlebitis 39, aneurysm of the arteries 21, and thrombosis of veins 18. The deaths were 24 from valvular disease of the heart (including 3 invalids and 5 out of hospital), 15 from aneurysm of the arteries (7 out of hospital), 5 from syncope (4 out of hospital), 4 from fatty degeneration of the heart (2 out of hospital), 2 from pericarditis, and 1 each from endocarditis, hypertrophy of the heart, dilatation of the heart, aneurysm of the heart (out of hospital), thrombus heart, endarteritis, and thrombosis of veins.

Diseases of the Respiratory System.—There were 1,754 admissions and 56 deaths (including two invalids who had left the Command), giving ratios of

India.

25·2 and ·80 per 1,000, the admission rate being lower than the preceding year's and decennial rates by 3·2 and 4·5 respectively, and the death rate also lower than the previous year's rate by ·46 and than the decennial rate by ·02. The average number of men constantly sick was 108·65, being in the ratio of 1·56 per 1,000, as compared with 1·72 in 1902, and 1·70 the decennial average rate. The highest admission ratio was 54·4 per 1,000, in the Rangoon district, which is an increase of 32·4 on the rate for the previous year. The next highest ratio was 36·8 in the Quetta district, which occupied the first place in 1902, a decrease of 7·3, followed by 35·0 in the Madras district, an increase of 2·4. The lowest admission ratios were 11·5 per 1,000, in the Deesa district, a decrease of 11·8; 13·4 in the Sind district, a decrease of 2·7; and 15·0 in the Bangalore district, which occupied the lowest place in 1902, an increase of 1·0. The highest death rate was 2·56 per 1,000, in the Bundelkhand district, as compared with 1·52 in 1902, followed by 2·15 in the Aden district, showing an increase of ·28 over the rate of the previous year, and 1·60 in the Meerut district, a decrease of ·25. Of the 1,754 admissions 1,162 were for bronchitis, 321 for pneumonia, 125 for pleurisy, 58 for laryngitis, 53 for spasmodic asthma, 10 for broncho-pneumonia, 6 for hæmoptysis, 3 each for abscess of lung, emphysema, and empyema, 2 each for congestion of lung, pulmonary apoplexy, and phthisis, and 1 each for tracheitis, dilatation of bronchi, cirrhosis of lung, and adhesions of pleura. Of the 54 deaths in the Command, 39 were from pneumonia, 4 from pleurisy, 3 each from broncho-pneumonia and empyema, and 2 (1 out of hospital), pulmonary apoplexy, and 1 each from bronchitis, congestion of lung, and cirrhosis of lung. The invalids died from pneumonia and abscess of lung respectively.

Diseases of the Digestive System.—There were 6,881 admissions and 131 deaths (4 of the latter occurring in invalids), the equivalent ratios being 98·8 and 1·88 per 1,000, which are lower than in 1902 by 1·6 and ·60, and also lower than the decennial average rates, by 13·1 and ·01. The average number of men constantly sick from these diseases was 316·75, giving a ratio of 4·55 per 1,000, as compared with 4·60 in the preceding year, and 5·09 the decennial average rate. The highest admission ratio was 136·6 per 1,000, in the Sirhind district, which is an increase of 7·4 on the rate for the previous year, when this district occupied the second place. The next highest ratios were 133·7 per 1000, in the Southern district, an increase of 22·3, and 132·7 in the Rohilkhand district, an increase of 38·6. The lowest admission ratios were 41·6 per 1,000 in the Deesa district, a decrease of 46·4, 62·9 in the Peshawar district, a decrease of 1·4, and 79·0 in the Poona district, a decrease of 13·3. The highest mortality ratio was 5·12 per 1,000, in the Allahabad district, an increase of 2·29, followed by 4·57 in the Narbudda district, an increase of 3·52, 4·51 in the Presidency district which occupied the first place in 1902, a decrease of 7·34. As in the previous year there was no mortality in the Deesa district. The lowest death rate amongst the other districts was ·32 in the Secunderabad district which occupied the penultimate place in respect of mortality in the previous year, a decrease of ·66, the next lowest being ·47 in the Lahore district, a decrease of ·79, and ·61 in the Sind district, a decrease of 2·61. The chief causes of admission were affections of the mouth and throat 2,432 (including sore throat 814 and tonsillitis 942), hepatic disorders 1,306 (including congestion of the liver 463, hepatitis 354, jaundice 306, and abscess of the liver 169), diarrhœa 927, indigestion 719, piles 427, colic 403, inflammatory diseases of the intestines 178 (including enteritis 69, typhlitis 56, and catarrhal inflammation 32), inflammation and ulceration of the stomach 165, hernia 107, cholecystitis 55, and constipation 52. The deaths in India comprised 91 (1 out of hospital) from abscess of the liver, 5 from cirrhosis of the liver, 4 each from enteritis (1 out of hospital) and peritonitis, 3 each from typhlitis, and hepatitis, 2 from jaundice, and 1 each from gangrene of the mouth, quinsy, ulceration of the stomach, hæmatemesis, dilatation of the stomach, colitis, hernia, intussusception, internal strangulation of the intestines, contraction of the intestines, obstruction of the intestines, gangrene of the rectum, congestion of the liver, cholecystitis and inflammation of the pancreas. The deaths among invalids were 3 from abscess and 1 from inflammation of the liver.

Abstract XXVIII shows the prevalence of and mortality from diarrhœa and hepatic diseases in the several districts, and Abstract XXIX the prevalence of and mortality from these diseases in each quarter of the year. The admission ratio for diarrhœa was 13·3 per 1,000, as compared with 12·9 in the preceding year. There was no death during the year under report. The highest admission ratio was 36·3 in the Rohilkhand district, showing an increase of 16·5 over the previous year's rate, followed by 35·9 in the Rangoon district, an increase of 28·2, and 27·0 in the Sirhind district which occupied the same place in 1902, a decrease of ·3. Among the other districts the lowest admission ratios were 1·9 per 1,000, in the Belgaum district which also showed the lowest ratio in 1902, against 1·1 in the previous year; 2·1 in the Madras district which also occupied the same position in the previous year against 1·9, and 4·3 in the Deesa and Sind districts against 10·0 and 3·2 respectively in 1902. As usual, diarrhœa was most prevalent in the third quarter, when the admission ratio was 4·3 per 1,000, followed by 4·2 in the second, 2·8 in the fourth, and 2·0 in the first quarter.

The ratio of admission for hepatic diseases was 14·4 per 1,000, and the death rate 1·44, as compared with 18·5 and 2·03 respectively in the preceding year. The highest admission ratio, for the third year in succession, was 27·4 per 1,000 in the Presidency district, a decrease of 19·2, the next highest being 27·3 in the Bombay district, an increase of 8·4, and the third highest 26·8 in the Madras district, an increase of 7·6. The highest admission ratios in the preceding year were in the Presidency, Sind, and Aden districts. The lowest admission ratio was 5·9 per 1,000 in the Bangalore district, a decrease of 10·8, the next lowest being 7·1, in the Nagpur district, a decrease of 8·6, and 8·1 in the Peshawar district, a decrease of 3·4. The death rate from hepatic diseases was highest in the Allahabad district, 5·12 per 1,000, as compared with 1·13 in 1902. The next highest mortality ratio was 4·12 in the Madras district, against ·96, followed by 3·47 in the Presidency district, which occupied the first place in the preceding year, a decrease of 7·97. There were no deaths in the Deesa and Sind districts. Amongst the other districts the lowest mortality ratios were ·24 in the Lahore district, a decrease of 1·02, ·32 in the Secunderabad district, a decrease of ·66, and ·41 in the Quetta district, a decrease of ·45. With regard to seasonal prevalence of hepatic diseases, the highest admission ratio, 4·0 per 1,000, occurred in the second quarter, followed by 3·9 in the third, 3·3 in the first, and 3·2 in the fourth quarter. The deaths were distributed as follows:—29, or ·42 per 1,000 in the third quarter; 25, or ·36 per 1,000 in the first quarter; 25, or ·35 per 1,000 in the second quarter; and 21, or ·31 per 1,000 in the fourth quarter.

Diseases of the Lymphatic System.—There were 1,406 admissions. The admission ratio was 20·2 per 1,000, which is 4·0 and 7·6 lower than the previous year's, and the decennial average rates respectively. As in 1902, there were no deaths in the Command, but an invalid who had left India died from goitre. The average number of men constantly sick was 150·51, giving a ratio of 2·16, which is lower by ·44 and 1·07 in the two comparisons. The highest admission ratio, 55·6 per 1,000, was in the Madras district, an increase of 20·2 on the rate for 1902. The next highest ratios were 45·9 and 42·1 per 1,000 in the Deesa and Rangoon districts, showing an increase of 14·3 in the case of the former and a decrease of 16·3 in the case of the latter. The order of sequence in the preceding year was Rangoon, Madras, and Presidency. The lowest admission ratios were 8·1 in the Peshawar district, a decrease of 6·6, 8·6 in the Aden district, an increase of 3·9, and 10·2 in the Quetta district, an increase of 5·9. 1,338 of the admissions were caused by diseases of the lymphatic glands, 41 by diseases of the spleen, 19 by inflammation of lymphatics, 6 by goitre (including 1 exophthalmic goitre), and 1 each by inflammation and hypertrophy of the thyroid body.

Diseases of the Urinary System.—There were 174 admissions and 15 deaths, (1 of the latter occurring in an invalid), the equivalent ratios being 2·5 and ·22 per 1,000, as compared with an admission ratio of 2·8 and a mortality ratio of ·20 in 1902, and with 2·1 and ·19 the corresponding decennial average rates. The highest admission ratio was 6·8 per 1,000 in the Bombay district,

India.

an increase of 1·6, the next highest being a ratio of 5·0 in the Bangalore district against 4·0 in the preceding year, and a ratio of 4·9 in the Southern district, an increase of 2·4. The highest mortality ratios were ·91, ·71, and ·70 in the Narbudda, Peshawar and Southern districts; there were no deaths in these districts except the last, which showed a decrease of ·13 on the death rate in the preceding year. The admissions comprised 62 for nephritis, 35 for incontinence of urine, 33 for cystitis, 21 for hæmaturia, 3 each for lithuria and irritability of the bladder, 2 each for pyonephrosis, pyelitis, calculus in kidney, nephralgia, albuminuria, and retention of urine, and 1 each for perinephritic abscess, hydronephrosis, calculus in urethra, oxaluria and calculus in the bladder. The deaths in India were 12 from nephritis (including 2 from granular kidney), and 1 each from pyonephrosis and pyelitis. The invalid died from albuminuria.

Diseases of the Generative System.—The admissions for these diseases numbered 5,274, with 1 death, the admission ratio being 75·8 per 1,000, as compared with 86·3 in the previous year, and 85·0, the average for the preceding ten years. The average number of men constantly sick was 461·28, the ratio being 6·63 per 1,000, against 6·94 in 1902, and 6·61, the decennial average rate. The highest admission ratio was 146·0 per 1,000 in the Presidency district, an increase of 5·5 on the ratio for the previous year. The next highest ratios were 144·0 per 1,000 in the Nagpur district, a decrease of 10·2, and 142·6 per 1,000 in the Rangoon district, which showed the highest rate last year, a decrease of 67·2. The lowest admission ratios were 33·9 in the Peshawar district, a decrease of 23·3; 40·9 in the Bombay district, against 61·9 in 1902, and 47·8 in the Quetta district, a decrease of 29·3. As in the preceding years, the majority of admissions were for soft chancre, already referred to under venereal diseases, the number for this disease being 4,334. Among the remainder there were 461 admissions for orchitis, 152 for balanitis, 96 for ulcer of the penis, 48 for stricture of the urethra, 42 for varicocele, 35 for hydrocele, 26 for phimosis, 19 for paraphimosis, and 16 each for urethritis and epididymitis. A case of extravasation of urine at Belgaum terminated fatally.

Diseases of the Organs of Locomotion.—There were 1,015 admissions with 2 deaths (including 1 in an invalid). The admission ratio was 14·6 per 1,000, which is 1·7 higher than in 1902, and 3·7 above the decennial average rate. The average number of men constantly sick was 60·92, giving a ratio of ·88 per 1,000, against ·81 in 1902, and ·80 the average rate for the preceding ten years. The highest admission ratios were 33·6 per 1,000 in the Southern district, being an increase of 22·0, 29·7 in the Rangoon district, an increase of 22·0, and 25·9 in the Belgaum district, an increase of 10·6. The three lowest ratios were 7·2 in the Deesa district, a decrease of 4·4, 7·5 in the Aden district, a decrease of ·9, and 7·7 in the Allahabad district, an increase of 1·5. The chief causes of admission were, synovitis 622, myalgia 121, hammer toe 53, periostitis 50, flat foot 33, and bursitis 25. The death in India was due to lumbar abscess, and the invalid died from necrosis.

Diseases of the Connective Tissues.—There were 1,641 admissions and 1 death, giving ratios of 23·6 and ·01 per 1,000, as compared with 21·6 and ·02 in the previous year, and 22·4 and ·01 the decennial average rates. There were 71·77 men constantly inefficient from these diseases, the ratio being 1·03 per 1,000, as compared with a similar ratio in 1902 and 1·09 the decennial average rate. The three highest admission ratios were 43·6 per 1,000 in the Nagpur district, an increase of 18·8, 43·2 in the Mhow district, which occupied the same place in the previous year, an increase of 14·2, and 41·5 in the Secunderabad district, an increase of 19·4. The three lowest ratios were 12·2 in Rohilkhand district, which also showed the lowest ratio in 1902, being an increase of 2·8, 12·8 in the Narbudda district, which also occupied the same position in the previous year, an increase of ·1 only, and 13·6 in the Bombay district, a decrease of 4·9. The causes of admission were abscess 1,027, inflammation 605, and œdema 9. A case of inflammation of the neck died at Umballa.

Diseases of the Skin.—There were 3,761 admissions, the ratio being 54·0 per 1,000, as compared with 49·2 and 54·5, the previous year's and the decennial

average rates respectively. The average number of men constantly sick was 159·14, giving a ratio of 2·29 per 1,000, as compared with 2·14 in 1902, and with 2·40 the rate for the preceding 10 years. The highest admission ratio was 142·0 per 1,000, in the Nagpur district, which occupied the second place in the preceding year, an increase of 38·7, the next highest ratios being 103·0 in the Madras district, an increase of 26·4, and 89·2 in the Aden district, which showed the highest ratio in 1902, a decrease of 18·2. The three lowest ratios were 28·5 in the Rohilkhand district, against 36·9 in 1902, and 32·3 in the Quetta district, showing an increase of 5·3, and 32·8 in the Rawal Pindi district, a decrease of 2·7. The chief diseases were boils 1,373, ulcers 674, eczema 527, pemphigus 282, onychia 237, whitlow 214, psoriasis 64, impetigo 47, sycosis 44, urticaria 40, herpes 36, wen 35, zona 34, and carbuncle 32.

INJURIES.—There were 6,723 admissions and 120 deaths. The admission ratio was 96·6 and the death rate 1·72 per 1,000, as compared with 93·8, and 2·11 in the previous year, and with 100·2 and 1·85 the corresponding average rates for the preceding 10 years. The average number of men constantly inefficient from injuries was 276·09, giving a ratio of 3·97 per 1,000 as compared with 4·24 in 1902, and 4·67 the decennial average rate.

General Injuries caused 321 of the admissions and 74 of the deaths as against 183 and 80 in the preceding year. The admissions comprised 193 cases of heat-stroke, 58 of heat-apoplexy, 52 of sun-stroke, 7 each of burns and scalds and multiple injury, and 1 each of effects of chemical irritants and corrosives, lightning-stroke, suffocation from submersion, and strangulation. The deaths were 24 (10 out of hospital) from heat-apoplexy, 20 (4 out of hospital) from heat-stroke, 11 (out of hospital) from suffocation from submersion, 9 (1 out of hospital) from sun-stroke, 4 (2 out of hospital) from multiple injury, 3 (out of hospital) from suffocation from plugging of air-passages with foreign substances, 2 from strangulation, and 1 (out of hospital) from suffocation from compression of chest.

Local Injuries caused 6,402 admissions and 46 (24 out of hospital) deaths. The chief causes of admission were wounds 1,835 (including 46 gunshot wounds), strains and sprains 1,776, contusions 1,512, abrasions 694, fractures 369 (including fractures of skull 12), dislocations 80, burns and scalds 53, and concussion of the brain 40. The deaths were 20 from wounds (including 13 (11 out of hospital) from gunshot, 1 of skull with fracture and meningeal hæmorrhage, and 6 (3 out of hospital) of other parts of the body); 12 from fractures (including 9 (2 out of hospital) fracture of base of skull, 2 (out of hospital) fracture of vault of skull, and 1 (out of hospital) fracture of skull); 7 from rupture of viscera (including 3 (2 out of hospital) of spleen, and 1 each of intestines, of duodenum (with contusion of parietes), of bladder, and of urethra); 3 (out of hospital) from dislocation of spine; 2 from contusion (1 being of brain and the other of thigh); and one each from laceration of brain and compression of spinal cord.

There were 21 cases of suicide as compared with 16 in 1902. Of these 12 were due to gunshot wounds, 4 to cut-throat, 2 to suffocation from submersion, 2 to strangulation, and 1 to poison (oxalic acid). In ten of the cases it is reported that no motive could be assigned, in 4 nothing is said one way or the other, and it was only in 7 cases that something has been attempted in that direction. These are two cases of gunshot wound; in one the act was committed owing to the depression caused from brooding over some "family troubles," in the other the man was under arrest and awaiting trial by court-martial; two cases of cut-throat, in one the man was much depressed owing to his retention in India for service whilst his regiment departed for home, and in the other the man suffered from ague, and during a fit of delirium he committed suicide; one case of submersion is believed due to the receipt of bad news from home; in one case of strangulation the deceased, who had a previous history of hard drinking and who at one time had developed symptoms of delirium tremens, while under observation for insanity hung himself with the punkah rope unobserved by the orderly on duty during the small hours of the morning, and one from oxalic acid by a man under the idea that syphilis he had contracted had made his life

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3. The non-appreciation of the soldier of the terrible ravages of venereal disease.
4. The large number of cases contracted on the line of march between stations.

During the year, as before noted, strenuous efforts have been made to prevent the contraction and spread of venereal disease. The moral tone of the troops has been taken in hand by their officers. Athletics and games have been encouraged, and every inducement offered in the shape of home comforts to induce the men to spend their evenings in barracks; institutes, coffee and recreation rooms with all the comforts of club life are receiving close attention of the authorities, billiard tables are being provided by the State, and closest possible sympathy in all forms of barrack amusements is exercised by Commanding, Company, and Medical Officers. The sale of intoxicant liquors is prohibited until sunset with the exception of one pint of beer at dinner time, and canteens are limited in the time they are allowed to supply beer in the evenings, and in the amount of liquor supplied to individuals. Special ablution rooms have been established in barracks and the cantonment code is being rigidly enforced. Venereal disease when it occurs is placed under the closest possible observation and treatment and intramuscular injections of mercury are almost universally adopted in all cases of syphilis, thereby reducing invaliding from this cause to a very considerable extent. With regard to the prevalence of venereal diseases in the different arms of the service, it is noted that the cavalry had an admission ratio of 221·2 per 1,000, as compared with 318·2 in 1902, thus showing a decrease of 97·0, the artillery 241·7 per 1,000 against 277·0, showing a decrease of 35·3, and the infantry an admission ratio of 269·4 per 1,000, against 292·0 in 1902, showing a decrease of 22·6.

The following table shows the admission and the constantly sick rates per 1,000 by Commands as compared with the figures for the previous year. During the year 1903, all the Commands except Burma district and Madras had decreased rates for constantly sick :—

Commands.	1902.		1903.		Increase.		Decrease.	
	Admission Rate.	Constantly Sick Rate.	Admission Rate.	Constantly Sick Rate.	Admission.	Constantly Sick.	Admission.	Constantly Sick.
Bengal	299·4	25·95	251·1	22·46	—	—	48·3	3·49
Punjab	217·5	19·23	176·1	17·32	—	—	41·4	1·91
Madras	348·7	29·33	334·7	32·90	—	3·57	14·0	—
Burma District ..	328·5	26·09	346·2	31·43	17·7	5·34	—	—
Bombay	286·7	24·04	259·6	21·28	—	—	27·1	2·76
India	281·4	23·63	249·5	22·52	—	—	31·9	1·11

Comparing next the prevalence of syphilis and gonorrhœa in the different districts, the Secunderabad district had the highest admission ratio for primary syphilis, 132·0 per 1,000, an increase of 59·3 on the preceding year's rate. The second highest ratio was 94·1 in the Bombay district, giving an increase of 22·3. Next come the Southern district with a ratio of 61·6, an increase of 37·7, and the Rangoon district, with a ratio of 61·5, an increase of 50·0. Other notable instances of increased admission rate were Aden (21·9), Rohilkhand (17·8), and Poona (15·3), besides four *more* districts where the increases were inconsiderable. The largest decrease

(58·9) is noticed in the Nagpur district, which had the highest admission rate during 1902 (95·4). There is a great reduction of secondary syphilis also in this district, showing 44·6 against 68·0 in the previous year. Next to Nagpur, the Belgaum and Meerut districts had also large decreases, the former showing 43·8 and the latter 32·9. The total number of districts showing decreases was 15, against 11 having increases in the disease. The lowest admission ratios for primary syphilis were 4·1 per 1,000 in the Quetta district, showing a decrease of 3·6, Peshawar 7·4, with a decrease of 2·5, and Bundelkhand district 9·4, with a decrease of 14·0. *India.*

For secondary syphilis, the Rangoon district had the highest admission ratio, 105·6 per 1,000, an increase of 26·1 on the preceding year's rate. Next comes the Southern district, with a ratio of 86·8 per 1,000, showing an increase of 26·6, after which the Bangalore district appears with 77·4 per 1,000, an increase of 20·0. Besides the above, Mandalay district (74·9), Belgaum district (72·2), Bombay district (70·9), Deesa district (70·3), Secunderabad district (69·4), Presidency district (66·3), Lahore district (61·2), also show a high admission rate. As in 1902, the Quetta district had the lowest admission rate (21·3), showing this year a decrease of 4·4. Similarly, the next lowest ratio was 21·9 in the Peshawar district, with a decrease of 9·5, following which the Oudh district comes as third, and the Sind district fourth in the list, showing decreases of 11·1 and 29·0 respectively as compared with the preceding year. Like primary syphilis, secondary syphilis had also decreased admission rate in more districts than for the increased rates in 1902, the former showing 14 against 12 for the latter. The largest increase was 26·6 in the Southern district, while the highest decrease was 36·5 in the Mhow district. Gonorrhœa was most prevalent in the Rangoon district, the admission ratio being 218·5 per 1,000, an increase of 73·9 on the previous year's rate. The second highest ratio was 167·2 per 1,000 in the Poona district, an increase of 4·9. The next highest ratios were 148·3 in the Bundelkhand district, 143·6 in the Presidency district, 142·7 in the Allahabad district, and 141·3 in the Belgaum district, all of which show lower admission rates compared with the previous year. The lowest admission ratios were 41·3 in the Peshawar district, and 51·9 in the Quetta district, both of which show considerable decrease in the admission rate compared with the previous year. It will be seen from the above that the Quetta and Peshawar districts had lowest admission rates for all forms of venereal disease in 1903. The Quetta district had lowest admission rates for venereal disease in 1902 also. Here, again, gonorrhœa had also decreased admission rates in 21 districts against only 5 for the increased rates. The largest increase was 73·9 in the Rangoon district, while in the other four districts the increases are too insignificant to mention here. For the decreased rates, Deesa stands first in the list of all increases and decreases, showing 66·0 in 1903 against 181·1 in 1902, the decrease being 115·1, to which is added 55·6 in the Rohilkhand, 53·2 in the Peshawar, and 51·1 in the Secunderabad districts.

Coming next to the prevalence of the disease by individual stations, it is found that the highest admission ratio was 660·0 per 1,000 at Satara, an increase of 341·5. Next comes Rangoon with a ratio of 576·6, an increase of 94·8; Cannanore 566·0, a decrease of 123·2; Camp Gharial 491·0, an increase of 303·2; Taragarh 477·3, a decrease of 46·5; Fort William 446·7, a decrease of 63·4; Bellary 446·2, an increase of 122·3. It has been noted before that individual stations had more decreases than increases in 1903. The highest admission rate in 1902 was 689·2 at Cannanore, but in 1903 the highest rate was 660·0 at Satara. The number of stations having increases over 100 and also the number having decreases over 100 have been stated before. Those having increases and decreases above 200 are given below :-

Increases.—Satara 341·5, Camp Gharial 303·2.

Decreases.—Lower Topa 304·9, Deesa 251·4, Fyzabad 222·1, Fort Attock 214·9, and Muttra 200·2.

In 19 stations, as compared with 26 in the preceding year, the admission ratio for primary venereal sores was over 150 per 1,000, while 17 more had an admission ratio of over 100 per 1,000. The highest ratios were 370·0 at Satara (strength 100); 273·6 at Cannanore (strength 106); 252·7 at Camp Gharial (strength 277); 227·3 at Taragarh (strength 44); 224·9 at Rangoon

India.

in their fifth year, a decrease of 1·75. The lowest invaliding ratio was 16·32 per 1,000 among men in their first year in the country, a decrease of 9·97, compared with the ratio for 1902.

The diseases of the circulatory system caused the invaliding of the largest number of men (including 105 cases of disordered action of the heart, and 106 of valvular disease), namely, 258, against 332 in the preceding year, giving a ratio of 3·71 per 1,000 as compared with 5·48 in 1902, and 3·28 the decennial average rate. Malarial fevers come next with 244 invalids, against 245 in the preceding year, when secondary syphilis occupied the same position; the ratio for 1903 was 3·51 per 1,000 compared with 4·05 in 1902, and 3·82 the rate for the preceding ten years. Debility comes next with 213 invalids against 286 in the previous year, giving a ratio of 3·06 as compared with 4·72 and 3·23 the previous year's and the decennial average rates respectively. Secondary syphilis caused the invaliding of 190 men, the invaliding ratio being 2·73 against 4·72 in 1902, when this disease occupied the second highest place, and 5·86 the average rate. There were 179 men invalided for diseases of the digestive system, giving a ratio of 2·57 as compared with 3·19 in the previous year, and 2·27 the decennial average rate. Diseases of the nervous system (including 78 mental diseases) caused 171 invaliding, and gave a ratio of 2·47 against 3·07 and 2·34, the rates for 1902 and decennial average respectively. Parasitic diseases caused 159 invaliding against only 5 in 1902. All these cases, except 1, were invalided for bilharzia hæmatobia, the origin of which was traced in most cases to South Africa, amongst men returning from active service therefrom. There were 101 invalids for tubercular diseases (including 91 for tubercle of lung), giving a ratio of 1·45 against 1·59 and 1·69 in the two comparisons. Diseases of the other organs of special sense caused the invaliding of 67 men (including 34 for perforation of the membrana tympani, and 13 for inflammation of the middle ear), the ratio being ·96 as against 1·32 in 1902 and 1·01, the decennial average rate. Sixty-five men were invalided for diseases of the organs of locomotion (including 18 cases of synovitis), giving a ratio of ·93 against 1·26 and ·92; 62 for local injuries (including 24 cases of fracture, 12 for wounds, and 6 each for contusions and concussion of brain), the ratio being ·89 against ·93 and ·95; 59 for dysentery, the ratio being ·85 against ·91 and 1·11; 53 for rheumatism, a ratio of ·76 against 1·16 and ·98; 52 for diseases of the eye, giving a ratio of ·75 against ·66 and ·56; 46 for enteric fever, giving a ratio of ·66 against ·74 and ·62; 28 for diseases of the respiratory system (including 13 for bronchitis, 6 for spasmodic asthma, and 5 for pneumonia), giving a ratio of ·40 against ·71 for 1902, and ·55 for the decennial average rate respectively; 21 for gonorrhœa, giving a ratio of ·30 against ·38 for 1902, and ·37 for the decennial average rates respectively; 14 for other general diseases, the ratio being ·20 against ·66 and ·53; 12 each for diseases of the lymphatic system, generative system, and general injuries, giving a ratio of ·17 in each case for 1903.

There were 909 men discharged during the year as medically unfit for further service, including 1 man discharged locally in India, the equivalent ratio being 13·06 per 1,000, which is lower than in 1902 by ·50, and than the decennial average rate by ·75. The principal causes of discharge were:—diseases of the circulatory system 159 cases (including 89 of valvular disease, and 47 of disordered action of the heart), or a ratio of 2·30 per 1,000 as compared with 5·48 in the previous year, and 2·49 the decennial average rate; diseases of the nervous system 157 cases (including 87 or 1·25 per 1,000 of mental disorder) or 2·26 per 1,000 as compared with 2·81 and 2·23 the preceding year's and decennial average rates; parasitic diseases 138 (all for bilharzia hæmatobia) or 1·98 per 1,000 as against ·02 in 1902 and ·00 the decennial average rate; secondary syphilis 71 cases, or 1·02 per 1,000 as compared with 1·42 and 2·07 in the two comparisons; tubercular disease 66 (including 56 cases of tubercle of lung) or ·95 per 1,000 as against ·88 and 1·15; 43 for debility, or ·62 per 1,000 as against ·84 and ·78; 42 for diseases of organs of locomotion, giving a ratio of ·60 per 1,000 against ·64 and ·57; 38 for diseases of organs of special sense, or a ratio of ·55 per 1,000 as compared with ·81 and ·72; and 35 each for digestive disorders and diseases of the eye, equivalent to a ratio of ·50 per 1,000 as compared with ·61 and ·25 respectively in 1902.

OFFICERS.—The average strength of officers for the year was 2,165, the number of attacks of illness 1,756, the number of deaths 29, and the number invalided to England 92. The ratio of sickness was 811·1 per 1,000, the death rate 13·39, and the invaliding rate 42·49. Compared with the corresponding ratios in the previous year, the ratios show decreases of 7·1, 2·66, and 31·56 respectively. There were 42 cases of *eruptive fevers* compared with 61 cases in 1902, comprising 33 of dengue, 4 of small-pox, 3 of rubella, and 1 each of chicken-pox and measles. The 4 cases of small-pox occurred at Lucknow, Agra, Jullundur, and Bombay. There were 34 cases of *influenza* and 2 of *plague*, 1 at Belgaum and 1 at Bombay. *Enteric fever* occurred in 54 cases with 8 deaths, as compared with 59 cases and 12 deaths in 1902. The admission ratio for enteric fever was 24·9 per 1,000, against 30·6 in the previous year, and as compared with an admission ratio of 19·6 per 1,000 amongst the warrant officers, non-commissioned officers and men during the year under report, while the death rate was 3·70 per 1,000, as compared with 6·21 in the preceding year, and 4·19 the death rate among the warrant officers, non-commissioned officers and men. The percentage of mortality to attack was 14·81 as compared with 20·34 in 1902, and with 21·38 amongst the warrant officers, non-commissioned officers and men during 1903. The cases occurred at the following stations:—Wellington (7 with 1 death), Poona (5 with 1 death), Quetta (4 cases), Lucknow, Meerut, Landour (1 fatal), Mian Mir and Murree (3 at each station); Naini Tal, Umballa (1 fatal), Cherat (1 fatal), and Malapuram (1 fatal), (2 at each station); Dum Dum, Dinapore, Fyzabad, Ranikhet, Chaubuttia, Nowgong, Chakrata, Kasauli, Dalhousie, Rawal Pindi, Madras, Bangalore, Belgaum, Bellary, and Mount Abu (1 at each station); and Delhi Manœuvres, 1 death only. *Simple continued fever* contributed 68 cases, giving a ratio of 31·4, an increase of 4·5 on the rate for the preceding year There was 1 case of *Mediterranean fever*. One fatal case of *cholera* was admitted at Ranikhet, there being none in the previous year. Fifty-two cases of *dysentery* with 5 deaths gave a ratio of 24·0 and 2·31 per 1,000 as compared with 23·8 and 1·04 in the previous year. *Malarial fevers* contributed 429 cases (comprising 403 cases of ague and 26 of remittent fever), giving a ratio of 198·2 per 1,000 against 217·0 in 1902. There were 2 cases of *erysipelas* and 3 of *tubercle of the lung*. *Venereal diseases* (including 20 cases of gonorrhœa, 3 of secondary syphilis and 3 of soft chancre) gave an admission ratio of 12·0 as compared with 8·8 in the preceding year. *Rheumatism* (including 13 cases of rheumatism, 8 of gout, and 2 of rheumatic fever) gave a ratio of 10·6 per 1,000, showing an increase of ·2. *Debility* furnished 45 cases, the ratio being 20·8 against 14·0. Included under *other general diseases*, there were 1 case each of mumps, cyst, wart, anæmia, and congenital phimosis, with one death out of hospital from tetanus at Mussourie. Twenty-three cases of *diseases of the nervous system* gave a ratio of 10·6 per 1,000, a decrease of ·3; the diseases furnishing this ratio were 15 of neuralgia, 4 of nervous weakness, and 1 each of pachymeningitis, vertigo, headache, and hysteria. *Diseases of the eye* contributed 15 cases, comprising 10 of conjunctivitis, 2 of iritis, and 1 each of functional night blindness, diplopia, and stye, giving a ratio of 6·9 per 1,000 as against 4·7 in 1902. There were 13 cases of *diseases of the other organs of special sense* (comprising 6 of inflammation of the external ear and 4 of inflammation of the middle ear, and 1 each of ozæna, necrosis of bone of nose, and inflammation of naso-pharynx), furnishing an admission ratio of 6·0 as compared with 5·2. *Diseases of the circulatory system* caused 8 admissions with 2 deaths, against 12 admissions and 2 deaths in 1902, giving ratios of 3·7 and ·92 per 1,000, against 6·2 and 1·04; the diseases were 3 of disordered action of the heart, 2 each of embolism and phlebitis, and 1 of valvular disease of the heart. The deaths were due to embolism and syncope. There were 43 cases of *diseases of the respiratory system*, bronchitis 24 (1 fatal out of hospital), pneumonia 8 (1 fatal out of hospital), pleurisy 4, laryngitis 3, empyema 2, and 1 each of spasm of larynx and hæmoptysis, the ratio, 19·9 per 1,000, showing an increase of 1·3. *Diseases of the digestive system* gave an admission ratio of 147·8 and a mortality ratio of ·92 compared with 150·2 and 2·59, the corresponding ratios in the preceding year; the number of admissions was 320, of which 2 ended fatally, the chief diseases being diarrhœa 84

India.

tonsillitis 50, inflammation of intestines 36, congestion of liver 34, jaundice 17, gastritis 15, sore throat 14, piles 13, colic and hepatitis 12 each, and indigestion 10. The fatal cases were 1 each of abscess of liver and jaundice. There were 27 cases of *diseases of the lymphatic system*, giving a ratio of 12·5 per 1,000, a decrease of 2·0. *Diseases of the urinary system* caused 9 admissions, the ratio per 1,000, 4·2, showing an decrease of 2·5, and there were 28 admissions for *diseases of the generative system*, the equivalent ratio being 12·9, a decrease of 2·1. There were 49 admissions for *diseases of the organs of locomotion* (including 37 cases of synovitis), giving a ratio of 22·6, an increase of 2·9. Fifty-four admissions from *diseases of the connective tissue*, of which 34 were from inflammation and 20 from abscess, gave a ratio of 24·9, showing an increase of 1·6. *Diseases of the skin* caused 87 admissions, including boils 48 and ulcers 17, the ratio, 40·2 per 1,000, showing an increase of ·3.

General injuries caused 18 admissions and 5 deaths. Of these 11 (2 fatal) were from heat-stroke, 3 from burns and scalds, and 2 each from sun-stroke and multiple injuries. The remaining 3 deaths all occurred out of hospital, 1 being from injuries sustained in a hurdle race at Dehra Dun and 2 from heat apoplexy while the officers were travelling in trains. The admission and death ratios were 8·3 and 2·31 as compared with 1·0 and *nil* in the previous year. *Local injuries* contributed 273 admissions and 3 deaths, the admissions comprising 86 for contusions, 65 for strains and sprains, 41 for fractures (3 of which were fracture of base of skull), 35 of wounds (1 of which was from gunshot), 18 of abrasions, 13 of concussion of brain, 9 of dislocations, 2 each of rupture of muscles and tendons and foreign bodies in tissue, and 1 each of burns and scalds and laceration of brain; while the deaths were 1 from gunshot wound by an officer at Chakrata who committed suicide while temporarily insane; 1 from fracture of vault of skull at Subathu, the result of a polo accident, and 1 from fracture of base of skull at Rangoon, also due to an accident (gunshot), the deceased dying two hours after the receipt of injury from cerebral compression due to hæmorrhage. The admission ratio was 126·1 as compared with 108·2 in 1902; while the death rate was 1·39 against 4·14 in the previous year. Under the head of *poisons* there were 5 admissions, comprising 2 of poisoning by ptomaines, and 1 each of poisoned wound by dog, by gardening tools and by septic matter. The causes of *invaliding* were enteric 18, debility 16, ague 12, dysentery 6, typhlitis 5, nervous weakness and synovitis 3 each; tubercle of lung, empyema, hepatitis, calculus in kidney, inflammation of connective tissue and concussion of the brain, 2 each; and 1 each of the following diseases; secondary syphilis, anæmia, inflammation of the middle ear, valvular disease of the heart, phlebitis, hæmoptysis, pneumonia, pleurisy, colitis, obstruction of intestines, congestion of liver, calculus in bladder, eczema, heat-stroke, contusion, gunshot wound, and fracture of base of skull.

WOMEN.—The average strength was 2,891, the number admitted 2,194, and the deaths 41, giving admission and mortality ratios of 758·9 and 14·18 per 1,000, which are lower than the corresponding ratios in the previous year by 40·7 and ·69 respectively. *Small-pox* was the cause of 5 admissions, and 1 death, as compared with 6 admissions and 2 deaths in the previous year, the admission ratio, 1·7 per 1,000, showing a decrease of ·6; the death ratio was ·35 as against ·78 in 1902. Of the cases, 1 each occurred at Allahabad (fatal), Lucknow, Umballa, Ahmednagar, and Bombay. *Other eruptive fevers* caused 27 admissions (19 from dengue, and 4 each from chicken-pox and measles), the ratio being 9·3 as compared with 14·9 in 1902. *Influenza* caused 8 admissions against 4 in the previous year, the ratio being 2·8 as compared with 1·6 in 1902. *Plague* caused 3 admissions with 1 death, the fatal case being admitted at Ferozepore and the other two cases at Mhow. From *enteric fever* there were 25 admissions with 7 deaths, against 20 admissions and 5 deaths in the previous year; the admission ratio was 8·6 while the death rate was 2·42 per 1,000, as compared with 7·8 and 1·96, the corresponding ratios in the preceding year. The stations showing the cases were Lucknow (1 fatal), Ranikhet, Kasauli and Secunderabad

(1 fatal) 2 each; and Barrackpore, Darjeeling, Lebong, Allahabad, Sitapur, Jubbulpore (fatal), Pachmarhi (fatal), Meerut, Muttra, Dagshai, Ferozepore, Sialkot (fatal), Murree, Peshawar (fatal), Poona, Mhow, and Kamptee (fatal), 1 each. *Simple continued fever* caused 28 admissions, giving a ratio of 9·7, an increase of 1·9 on the rate in the preceding year. The admissions from *dysentery* were 58 against 44 in the previous year, while there were 2 deaths against 1 in 1902. The admission ratio was 20·1 as compared with 17·2 in the preceding year. *Malarial fevers*, 328 cases of ague, with 4 deaths and 12 cases of remittent fever, gave admission and mortality ratios of 117·6 and 1·38 as compared with 153·8 and 1·96 in 1902. Under the head of *septic diseases* are returned 2 cases each of erysipelas (1 fatal), puerperal pyæmia and puerperal septicæmia, giving ratios of 2·1 and ·35 respectively against 4·3 and 2·74 the corresponding ratios in the preceding year. There were 16 admissions from *tubercular diseases* (15 of which, with 2 deaths, were tubercle of lung and 1 of joint), the corresponding ratios showing an increase of 3·2 in the case of admissions and a decrease of ·9 in the case of deaths on the previous year's rates. There were 2 cases of *secondary syphilis*, against 4 in 1902. Under *parasitic diseases* there were 6 admissions from tæhia solium, 4 from scabies and 2 from ringworm. *Alcoholism* caused only 1 admission, as in the preceding year. *Rheumatism* caused 24 admissions, the ratio being 8·3 per 1,000, as against 6·7 in 1902. 827 admissions with no deaths are recorded under the head of *debility*, the admission ratio, 286·1, showing a decrease of 27·4 on the preceding year's rate. Under the heading of *other general diseases* are included 26 cases of anæmia, and 2 each of mumps and fibroma, and 1 of immaturity at birth. *Diseases of the nervous system* furnished 56 cases with 1 death, comprising neuralgia 16, hysteria 13, epilepsy 11, nervous weakness 4, multiple neuritis and puerperal convulsions (1 fatal) 3 each, chorea 2, and neuritis, hemiplegia, vertigo and headache 1 each; the admission and death ratios being 19·4 and ·35 against 16·0 and ·39 respectively in 1902. There were 5 admissions under the head of *mental diseases*, from melancholia 3, and mania 2 against 1 for melancholia in 1902. *Diseases of the eye* caused 12 admissions, 7 from conjunctivitis, 2 from iritis, and 1 each from ulcerative keratitis, optic neuritis and blepharitis marginalis, giving a ratio of 4·2 against 10·6 in the previous year. *Diseases of the other organs of special sense* were the cause of 10 admissions (9 from inflammation of the external ear, and 1 from rhinitis) and the ratio, 3·5, showing an increase of ·8 over the rate of the previous year. There were 36 admissions with 7 deaths from *diseases of the circulatory system*, giving ratios of 12·5 and 2·42 respectively as compared with 7·0 and 1·17 in the preceding year. The causes of admissions were valvular diseases of the heart 21 (3 fatal), disordered action of the heart 5, varix 3, thrombosis of veins 2 (1 fatal), atrophy of the heart, embolus (fatal), embolism (fatal), phlebitis, and varicose aneurysm, 1 each. There was also a death from syncope out of hospital at Lebong. *Diseases of the respiratory system* gave an admission ratio of 18·7 per 1,000, as compared with 17·6 in the previous year. There were 4 deaths under this head, 3 from pneumonia and 1 from phthisis, against *nil* in 1902. The cases were 54 in number, comprising 43 of bronchitis, 6 of pneumonia, 3 of pleurisy, and 1 each of spasmodic asthma and phthisis. *Diseases of the digestive system* caused 241 admissions with 4 deaths, giving respective ratios of 83·4 and 1·38, as compared with 69·3 and 1·96 respectively in 1902. The chief causes of admissions were diarrhœa 57, indigestion 44, sore throat and tonsilitis 21 each, gastritis 17, colic 14, constipation 12, and piles 10. The 4 deaths were due, 1 each to obstruction of the intestines, hepatitis, cirrhosis of the liver and peritonitis. *Diseases of the lymphatic system* furnished 4 cases of inflammation of lymph glands, and 2 each of inflammation of lymphatics and exophthalmic goitre. *Diseases of the urinary system* caused 8 admissions comprising 3 cystitis, 2 each of acute and chronic nephritis, and 1 of albuminuria. There were 246 admissions with no deaths from *diseases of the generative system*, including 98 from abortion, 19 from menorrhagia, 18 from metritis, 16 from inflammation of the ovary, 11 from cramps and spurious labour pains, and 10 from metrorrhagia. The admission rates was 85·1 as compared with 97·8 in the previous year. *Diseases of the organs of locomotion* caused 8 admissions, including 4 of synovitis. *Diseases of the connective tissue* caused 21 admissions, of which

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17 were due to abscess and 4 to inflammation of the connective tissue. *Diseases of skin* record 40 admissions, of which 13 were from boils, 11 from ulcers, 5 from eczema, 4 from onychia, 2 from whitlow, and 1 each from impetigo, psoriasis, pemphigus, dermatitis, and lupus. Of the 31 cases returned under *injuries*, 8 were due to wounds, 6 to sprains and strains, 4 to heat-stroke, 3 each to contusions and fractures, 2 each to burns and scalds and abrasions, and 1 each to burns and scalds (general), heat-apoplexy, and foreign bodies in the œsophagus. There were 4 deaths, 1 due to heat-stroke and 1 to heat-apoplexy, 1 to multiple injury, the result of a fall down the "khud" at Subathu, and 1 to foreign bodies in the œsophagus. Under *poisons* there were 2 admissions only, one from poisoned wound by scorpion, and one from poison ptomaines (fish). One case was returned as no appreciable disease.

CHILDREN.—The average strength was 4,677, the number of admissions 2,313, and the deaths 173. The admission ratio was 494·5 per 1,000, a decrease of 100·5 on the rate for the previous year, and the death rate 36·99, a decrease of 8·24. *Small-pox* caused 3 admissions and 1 death, same as in the previous year, the equivalent ratios were also the same in both the years under comparison being ·6 and ·21. The cases occurred, 2 at Muttra (1 fatal) and one at Bombay. The child attacked with small-pox at Bombay was twice vaccinated, once in January, 1902, and a second time in October, 1902, but the result failed on both occasions. *Other eruptive fevers* caused 264 admissions, with 2 deaths against 308 admissions with 8 deaths in 1902, the admission ratio being 56·4 as compared with 65·4 in the preceding year. Of the cases, 145 with 2 deaths were due to measles, 94 to chicken-pox, 11 to dengue, 8 to rubella, 5 to scarlet-fever, and 1 to cow-pox. There were 7 cases of *influenza*, against 9 in 1902. *Diphtheria* caused 11 admissions with 4 deaths, against 7 admissions and 3 deaths in 1902. The fatal cases occurred 1 each at Dum Dum, Secunderabad, Meiktila, and Mhow. *Enteric fever* was the cause of 25 admissions and 2 deaths as compared with 21 admissions and 3 deaths in the previous year; the admission ratio, 5·3, is ·8 higher than in 1902, but the death rate, ·43, is ·21 lower. The cases were distributed as follows:—3 cases at Mhow, 2 cases each at Ranikhet, Peshawar, Bangalore (1 fatal), Poona, Kamptee, and Quetta, and 1 case each at Dinapore, Lucknow, Chaubuttia, Meerut, Roorki, Jullundur, Ferozepore (fatal), Secunderabad, Satara, and Nasirabad. There were 52, cases of *other continued fevers*, including 1 fatal case of cerebro-spinal fever, the ratio, 11·1 per 1,000, showing an increase of ·1 on the previous year's rate. The fatal case occurred at Campbellpore. There were 3 cases of *cholera* with 2 deaths, against none in the previous year. Two admissions with 1 death occurred at Sialkot and 1 admission, which proved fatal, at Ranikhet. *Dysentery* caused 51 admissions with 13 deaths, giving ratios of 10·9 and 2·78, as compared with 18·3 and 1·91 in the previous year. *Malarial fevers*, 461 cases of ague, with 12 deaths, and 7 cases of remittent fever, gave admission and mortality ratios of 100·1 and 2·57 per 1,000, against 132·3 and 1·91 in 1902. *Septic diseases* caused 3 admissions and 2 deaths, all from erysipelas, the equivalent ratios being ·6 and ·43 against 1·1 and ·21 in the previous year. *Tubercular diseases* caused 12 admissions and 8 deaths, the equivalent ratios being 2·6 and 1·71, as compared with 2·8 and 1·06 in the previous year; the cases comprised tubercle of various parts of the body, viz.:—membranes of the brain (5 cases with 4 deaths), lung (2 cases), intestines (2 cases with 1 death), peritoneum, lymph vessels, kidney (1 fatal case each, the former not being admitted), and joint (1 case). *Gonorrhœa* caused 2 admissions. A case of *hydrophobia* in a child under treatment in the Pasteur Institute of India (Kasauli) for dog-bite, proved fatal. The case was badly bitten in the hand and face and came late for treatment. *Parasitic diseases* caused 23 admissions, including 10 of scabies, 7 of tænia solium, 3 of ascaris lumbricoides, and 1 each of culex pipiens, ringworm, and oidium albicans. There were 3 cases (1 rheumatic fever) of *rheumatism*. *Debility* caused 214 admissions and 6 deaths, the admission ratio, 45·8, and the death ratio 1·28 per 1,000, showing decreases of 16·6 and 1·48 respectively over those of 1902. *Other general diseases* contributed 96 cases and 13 deaths, the diseases included under this heading being

mumps 30, whooping-cough 29 (1 fatal), immaturity at birth 12 (11 fatal), congenital phimosis and anæmia 10 each, rickets 2, and cyst, purpura, and fissure of the spinal column (fatal) 1 each. *Diseases of the nervous system* caused 38 admissions and 17 deaths, as compared with 66 and 36 in the previous year, giving admission and mortality ratios of 8·1 and 3·63 per 1,000, against 14·0 and 7·64 in 1902; the diseases comprised under this head were infantile convulsions 16 (9 fatal), cerebral meningitis 7 (5 fatal); paraplegia, chorea, epilepsy, laryngismus stridulus and neuralgia 2 each, and spinal meningitis (fatal), external hydrocephalus (fatal), anæmia of the brain, internal hydrocephalus (fatal), and hysteria 1 each. There was also an admission for delusional insanity. *Diseases of the eye* caused 57 admissions, the ratio being 12·2, against 36·5 in the previous year; the cases comprised 48 of conjunctivitis, 5 of ulcerative keratitis, 2 of blepharitis marginalis and 1 each of inflammation of lacrymal sac and stye. Under the heading of *diseases of other organs of special sense* there were 5 cases of inflammation of the external ear and 1 of inflammation of the middle ear. *Diseases of the circulatory system* were represented by 2 cases each of valvular disease and disordered action of the heart, and 1 case of thrombosis (artery). *Diseases of the respiratory system* caused 272 admissions and 17 deaths, the admission and mortality ratios being 58·2 and 3·63 per 1,000, as compared with 64·1 and 4·67 in 1902 respectively, the diseases being bronchitis 241 (11 fatal), pneumonia 18 (3 fatal), broncho-pneumonia 7 (3 fatal), croup 2, and laryngitis, spasmodic asthma, pleurisy and empyema 1 each. *Diseases of the digestive system* caused 431 admissions and 63 deaths, the admission and mortality ratios being 92·2 and 13·47, against 81·5 and 14·02 in the preceding year; the principal causes of admission were 206 (31 fatal) cases of diarrhœa, 88 (10 fatal) of disorders of dentition, 40 of tonsilitis, 39 (21 fatal) of inflammation of intestines, and 10 of sore throat. The remaining death was from hepatitis. *Diseases of the lymphatic system* contributed 7 cases, and those of the *urinary system* 4, with 1 death from acute nephritis. There were 5 (1 fatal) admissions for *diseases of the generative system*, the death being due to asphyxia of infant. *Diseases of the organs of locomotion* caused 4 admissions, and those *of the connective tissue* 19, comprising 11 cases of abscess and 8 of inflammation. There were 130 admissions for *diseases of the skin*, the diseases comprising 38 of boil, 25 of eczema, 22 of pemphigus, 16 of impetigo, 13 of ulcer, 9 of urticaria, 3 of chilbain, 2 of whitlow, and 1 each of herpes and wen. For *general injuries* there were 9 admissions, with 5 deaths, 5 (2 fatal) for burns and scalds, 2 (1 fatal) for sun-stroke, and 1 each for heat-stroke (fatal) and multiple injury. The remaining death was due to suffocation from submersion due to an accident. *Local injuries* caused 77 admissions and 2 deaths, including wounds 33, fractures 16 (including a fatal case of fracture of the base of the skull), contusions 13, burns and scalds 6 (1 fatal), strains and sprains 5, and dislocation, concussion of the brain, separation of the epiphyses and greenstick fracture 1 each. Under *poisons* there were 7 cases of dog-bite, 2 from eating berries of unknown kind, and 1 in a child who swallowed a copper coin. The last three cases occurred at Secunderabad. *India.*

SANITARY CONDITIONS.

Bengal Command.

India. Presidency District.—*Calcutta.* A scheme for the abolition of the dual system of water supply at Fort William is under consideration. The drinking water is of excellent quality, but there is no doubt that the washing water drawn from the "Havildar's" tank is likely to be used for drinking purposes. There is overcrowding in the fort and barracks, no remedy appears possible except reduction of garrison. The septic tank has not been a success in dealing with excreta, and it is proposed to introduce the water-carriage system, both for the fort and hospital. The quarter at Hastings is overcrowded, and as part of it is under municipal control it is difficult to deal with.

Darjeeling.—The water supply of troops is from a spring whence it is conveyed in pipes to reservoirs and thence carried in cans. As the catchment area is liable to pollution, a piped supply from another source is under consideration. A hot-water apparatus has been provided for baths.

Dum Dum.—Anti-malarial measures have been carried out, but malaria is very prevalent, as in the rains the ground is water-logged to an extent which is irremediable.

Barrackpore.—Owing to the country often being water-logged and the barracks getting damp, efforts are being made to improve drainage. In some cases latrines are too near cook-houses, and to remedy this a number have been removed. An incinerator is to be introduced shortly. The health of the troops is still bad, dysentery being very prevalent. The reduction of the garrison is under consideration.

At *Lebong*, *Fort Fulta* and *Fort Chingrikhal*, no insanitary condition was noticed.

Allahabad District.—An extension of pipes to carry water into the bungalows at *Allahabad* has been recommended.

Benares.—Three new barracks have been taken into use. Sanitary conditions are satisfactory except some bazar latrines, and new pattern ones will be adopted as funds permit. There is a scheme to have the water, which is supplied from a municipal source, conveyed in pipes to barracks; at present it is brought in metal barrels.

At *Dinapore* there was an epidemic of enteric fever, this was investigated and found to be due to contamination of milk supply. A dairy farm has been recommended. Owing to its insanitary state, the village of Shahpur is to be partially removed. During rains the ground is waterlogged and malaria prevalent, this is irremediable but anopheles *larvæ* are dealt with.

Narbudda District.—*Jubbulpore.* New lines for transport followers are to be built as there has been overcrowding in those at present occupied. The marked decrease in malaria admissions is ascribed to clearing of surface drains, filling up of hollows, and anti-malarial measures generally.

Saugor.—Pending a decision whether British troops are to be retained at this station, the reconstruction of the hospital is held in abeyance.

Pachmarhi.—In the dry season, when the water is scanty, the main well pump did not reach the water level, this is being remedied.

Oudh District.—*Lucknow.* The milk seller's quarter in the Sadr bazar has been supplied with special sheds, which is an improvement on previous conditions. The twenty washing tanks near the bazar being in an insanitary condition, a scheme for a proper laundry is under consideration. The surface drainage is fair, but in the rainy season there is a tendency to pools forming, and kerosine oil is largely used to kill the *larvæ* of mosquitoes.

Cawnpore.—The question of connecting the cantonment with the municipal drainage is under consideration.

Fyzabad.—Complaints about overflow of water and slops about the cook-houses have been made, and the matter is under consideration. The number of urinals are said to be too few, and the conservancy establishment too small, although both are according to scale.

At *Fatehgarh* and *Sitapur* the sanitary condition was satisfactory.

ROHILKHAND DISTRICT.—*Naini Tal.* The water supply, though of good quality, is carried in pails into barracks; this has been brought to notice, and it is hoped to have the water conveyed in pipes. A new hospital has been sanctioned, the present one being in a delapidated condition and obsolete.

Ranikhet.—The ordinary water springs ran short, and others had to be employed. One of these became contaminated and started an epidemic of cholera (25 cases), and the well in question was at once abandoned. A piped water supply will shortly be in operation.

There were no defects specially brought to notice in the remaining stations in the Rohilkhand district.

MEERUT DISTRICT.—*Meerut.* A very severe outbreak of enteric fever occurred, which was most carefully investigated; no definite cause was discovered, although possibly flies were largely responsible for the spread of infection. On the recommendation of the Command Sanitary Officer the 15th Hussars were sent into camp, and their lines and bedding were thoroughly disinfected. It is proposed to cement latrine floors.

Delhi.—The health of the troops quartered in the Fort is not good, malaria being very prevalent in the rainy reason.

At *Landour* an incinerator has been taken into use for the destruction of excreta, and is said to have worked well.

At the remaining stations no insanitary conditions were noticed.

BUNDELKHAND DISTRICT.—*Agra.* A new police barrack is in course of building. A scheme has been proposed to divert the storm water from the moat, where it lies during the rainy season.

Jhansi.—Owing to an increase in the strength of the garrison, a new block will be built at the station hospital, where at present the accommodation is insufficient.

Nowgong.—The new urinals (troughs) placed in the Royal Artillery lines are said to be less effective than the old pattern, and to lead to greater pollution of the soil.

PUNJAB COMMAND.

SIRHIND DISTRICT.—*Umballa.* A piped water supply is being constructed, and the latrine arrangements, which are at present bad, are under the consideration of the Command authorities.

Kasauli.—The sanitary condition is fair. An additional incinerator has been recommended. The piped water supply will shortly be completed.

Dagshai.—A new larger main from the springs to the service reservoir has been recommended, as at present the piped water supply is insufficient. The old dairy having been frequently badly reported upon was closed during the year and is not to be re-opened. The want of a Government dairy has been brought to notice.

Jutogh.—Funds have been granted to build a station family hospital.

At *Solon* and *Subathu* the sanitary conditions were good.

RAWAL PINDI DISTRICT.—*Rawal Pindi.* Anti-malarial measures were carried out during the year, but the results were not very good. The water supply was very short during the hot weather, and an attempt has been made to remedy this by the construction of a "bund" across the bed of the river near the wells.

Sialkot.—A new Government dairy is in course of building and will be opened shortly. A piped water supply has been approved. The danger of native bazars being close to barracks has been pointed out, and a recommendation was put forward that all, except the Sadr bazar, should be done away with or kept permanently out of bounds.

At the remaining stations in the Rawal Pindi district the health of the troops and the sanitary condition was satisfactory.

India.

PESHAWAR DISTRICT.—*Peshawar.* The area of the sand filter beds being insufficient, an additional filter bed is being added.

The question of improving the latrines, and the want of proper laundries for units, is under consideration.

Cherat.—A piped water supply was introduced during the year.

Nowshera.—A new school house is to be built, the old one being very cold and draughty. Sanction has been given for a piped water supply. An incinerator is noted as being required.

Fort Attock.—During the year electric lighting and fans propelled by electricity have been fitted in barracks and officers' quarters. The method of distributing water is unsatisfactory, and a piped supply has been recommended.

LAHORE DISTRICT.—*Mian Mir.* The question of bad drainage and the want of a Government dairy is under consideration. A piped water supply has been sanctioned.

Ferozepore.—The surface drainage at this station is reported as bad.

Amritsar.—Malarial fevers were very prevalent during the year. It has been recommended that this cantonment should not be garrisoned by British troops.

At the remaining stations no special insanitary conditions were noticed.

MADRAS COMMAND.

MADRAS DISTRICT.—*Fort St. George.* The foundation of the station hospital is insecure, and as a result there is formation of cracks in walls and leaks in the roof. No permanent repairs can be effected until settlement ceases, and temporary repairs are carried out as required. The native latrines near the hospital are being gradually removed.

No serious defects are reported from any of the other stations in the district.

SECUNDERABAD DISTRICT.—*Secunderabad.* The distribution of water in wooden vessels is being gradually abolished, and steps are being taken to provide a new piped supply for all purposes throughout the station. It has been suggested that Larymore boilers should be introduced, as the boiling of water under regimental arrangements is not satisfactorily carried out.

SOUTHERN DISTRICT.—*Wellington.* The officers' quarters, usually known as Paradise Alley, are reported to be insanitary, owing to want of ventilation, absence of damp-proof course, and faulty position of servants' latrine and outhouses; the cost of intercalating damp-proof course is prohibitive. Steps are being taken, however, to remedy the other defects brought to notice.

No serious defects are reported from the other stations in this district.

BANGALORE DISTRICT.—*Bangalore.* Trough urinals are being substituted for those at present in use in the British Infantry lines, which are of antiquated and bad pattern. As the water supply is turbid during September and October, the substitution of Jewell filters for English sand filters has been recommended. The construction of a *dhobies' ghat* is under consideration. Conservancy remains extremely unsatisfactory; wooden barrels are used for removal of urine in British, and basket carts are still in use for fæcal matter in native lines. It has been recommended that the Quetta trolly system be substituted for that at present in vogue, but the proposal is being held in abeyance pending a final settlement of the question as to whether the municipality should undertake the conservancy of troops at Bangalore.

BELGAUM DISTRICT.—*Belgaum.* The urinals of Nos. 1 and 16 barracks are too close. It has been recommended that new ones be erected on well raised plinth to obviate formation of earth pits. Latrines for married quarters and cookhouses are under the same roof; this will be remedied as soon as funds are available. The surface drainage of the Fort is bad, due to configuration of ground.

Bellary.—Quarters allotted for officers attending musketry classes are crowded too close; this question is under consideration. New duplex lamps have been supplied to the station hospital, which was badly lighted.

BURMA DISTRICT.

India.

RANGOON DISTRICT.—*Rangoon.* In the Royal Artillery lines the barracks which were burnt down have been replaced; the new buildings are satisfactory, and the roofs are tiled. New boilers for boiling drinking water have been supplied, and a latrine and urinal have been erected for the school. Urinals in barracks are now on the trough system. In the British infantry lines those which were occupied by followers and were found to be insanitary have been abolished; no other accommodation has been found for those ejected except the *dhobies*, who have been provided with a washing place at the municipal laundry. The abolition of *mussacks* was recommended, and this has been partly carried out; they are not used for carrying drinking water or water required in cookhouses. A large number of minor recommendations have been made during the year, and they have all been attended to as far as practicable and expedient.

MANDALAY DISTRICT.—*Mandalay.* General sanitary condition satisfactory with the exception of surface drainage which is due to the natural configuration of the ground and is not capable of being remedied. A new water supply is under consideration, that at present in use being unfit for drinking and cooking purposes.

Meiktila.—It is under consideration to increase the number of settling tanks in the water-works. Extension of small drains around the barracks and hospital have been carried out, also the removal of cattle sheds to a greater distance from cantonments.

Thayetmyo.—A *pucca* masonry drain has been made to the north of the station hospital. Tanks with stop-cocks have been provided for use in the hospital bath rooms, and a Larymore boiler has been supplied to the barracks. Swing gauze doors are required for the kitchens and estimates are being prepared.

Shwebo.—The question of a new water supply is under consideration, as the present supply is unsatisfactory, being obtained from one well and is brackish from dissolved salts. Six artesian borings have been made, two in the cantonment and four in the town with unsatisfactory results, the water obtained containing too large a proportion of salines for drinking purposes. Larymore boilers have been supplied to the station and have given great satisfaction. The latrine accommodation for the Sadr bazar is insufficient and is under consideration of cantonment authorities. A surface cement drain 136 feet long has been constructed between Nos. 6 and 20 barracks to carry off the wash water from the soda water factory, and a cholera shed for use of native patients in connection with the followers' hospital has been erected.

Bhamo.—The well, from which drinking water for the troops is drawn, has been provided with a "dome" and a pump has been erected. Mosquito nets were recommended to be taken into general use by the troops, but the necessary sanction was not given the initial expense and recurring cost of the supply being prohibitive. The unsatisfactory condition of the *dhobies' ghat* for washing hospital clothes was remedied, and the night urinals in barracks which consisted of wooden pails of an old pattern were replaced by iron buckets. Several recommendations could not be carried out owing to lack of funds.

BOMBAY COMMAND.

POONA DISTRICT.—*Poona.* At Ghorpuri the cattle lines and regimental dairy have been removed to a suitable site. The removal of the Ghorpuri bazar was recommended, owing to its insanitary state, but this was not considered practicable on the grounds of expense. The surface drains from Ghorpuri lines have been extended, but not far enough, and it is under consideration to carry the extension to Byroba nullah. Catch-pits which existed in several places in the Wanowrie lines have been abolished. The Wanowrie bazar is in a generally insanitary condition, this has been represented repeatedly. The station hospital at Wanowrie is again brought to notice as being in every way unsuited for a modern hospital. Plans for a new hospital, retaining the present one for venereal cases, have been

India.

approved. The cow and buffalo lines in the Argyll and Sutherland Highlanders' lines are in a most offensive condition, they are much too close to barracks, but no other site is available at present.

Kirkee.—The overcrowding in the infantry detachment block will shortly be relieved, as No. 10 married quarter is being remodelled for single men. The drainage in barracks is defective, and surface drainage has been recommended; at present the water from bath and cookhouses is collected in stone "howds" and iron buckets respectively. The demolition of two of the assistant surgeons' quarters at the station hospital has been recommended owing to the plinths being below the level of the ground, and a proposal put forward that they be replaced by a block of quarters on the standard plan.

Ahmednagar.—At Fort barracks the kitchens, latrines and urinals were too close together, this has now been remedied. The married quarters of the British infantry are being reconstructed; they were insufficient, and kitchens and latrines were in the same building. A *dhobie's ghat* is being constructed near the Royal Artillery lines, the water for washing purposes to be drawn from the aqueduct. To make suitable store rooms the venereal wards have been reconstructed to answer this purpose. Several other minor improvements have been carried out.

Purandhur.—The general sanitary condition of this station has been satisfactory. During the year three recent pattern urinals have been erected.

Satara.—It was recommended that the drain from *dhobie's ghat* behind the station hospital be extended to join the native infantry lines drainage system, and that the pond and nullah on Church Road be drained, also that movable latrines (Major Walton's pattern) be erected for native infantry lines and hospital, Sadr bazar and servants' lines, and station hospital. With the exception of these recommendations the condition of this station is fairly satisfactory.

MHOW DISTRICT.—*Mhow.* The surface drains have been put in order, and unused wells and surface pools filled up. Insanitary houses in the bazar have been pulled down and the pattern and surroundings of the native latrines have been improved.

Indore.—The removal of latrines in barracks and married quarters to a greater distance has been recommended. At present one latrine for the men is within 40 paces from the cookhouse and 10 from the canteen, and in the married quarters there is a latrine 9 paces from the coffee shop. An estimate has been prepared, but the cost being high, requires revision. A separate well for the use of European troops and hospital staff with pipes laid on to the barracks, officers' quarters and garden, hospital, assistant surgeon's quarters and garden, is under construction. The kitchens of married quarters are being provided with a meat safe and a receptacle for slops. Drains have been extended to a safe distance to prevent stagnation of water.

Nasirabad.—It is under consideration to cover up all wells at the source of the water supply; at present they are open to contamination. A strong recommendation was put forward that the water supply for the cantonment be obtained from Bir Tank, but the civil authorities objected. With a view to cutting off mosquito breeding grounds, it was recommended that all unused wells in barracks be covered in, leaving a removable opening, in order that they might be used if necessary; sanction has been obtained to cover in six wells during the current financial year, and the remainder when funds are available. It was also represented that efficient drains should be provided to carry off the waste water.

Taragarh.—The sanitary condition of this station is very satisfactory, except that the latrine of No. 6 Barrack is too near cookhouse and barrack room; this was brought to notice.

DEESA DISTRICT.—*Deesa.*—Self-closing wire-gauze doors have been provided to cookhouse in Royal Artillery lines, and wire netting has been fitted to roof ventilators of station hospital; in both cases the result has been satisfactory.

Mount Abu.—The urinals are very old masonry buildings, the walls of which have become offensive and insanitary from urinary saturation. They are also insufficient in number, and plans and estimates for constructing a new modern type of urinal have been made, and the work will, it is anticipated, be commenced shortly. The water supply being insufficient, a new well is under construction. A proposal has been put forward that a pump with an accessory cistern be provided to No. 30 drinking-water well, to prevent contamination of the water supply, as at present situated, the leakage and drippings return to the well, and the fatigue party who pump up the water practically stand on the well when working it. A site for building recreation and institute buildings has been selected.

BOMBAY DISTRICT.—*Colaba.* The removal of three native "chawls" from the back of the married quarters has been recommended as they are always in a very insanitary condition and a standing menace to the health of the troops. It has been brought to notice that a proper system of drainage should be substituted for the present manner of removing waste water from the cookhouses and wash-houses. The substitution of the water closet system and its connection with the municipal drain instead of the present pail system is under consideration.

Deolali.—The drinking water at the hospital not being boiled before issue, application was made, and sanction given for coolies to work the Larymore boiler.

NAGPUR DISTRICT.—*Kamptee.* The wells are covered with indifferently fitting wooden platforms on which natives stand to work the pumps, and it has been recommended that subsidiary wells be sunk alongside those supplying the water. The drainage of the ground to the south-west of the British infantry lines is being gradually carried out, and some improvements have been made during the past year. Owing to lack of funds, the cantonment authorities cannot carry out certain recommendations regarding the filling in of excavations. The ventilation of the latrines was much improved and the better ventilation of huts in the "syce" lines Royal Field Artillery is being carried out.

Sitabaldi.—The general health of the troops during the year has been good, and the sanitary condition of barracks and surroundings satisfactory.

SIND DISTRICT.—*Karachi.* With a view to combat the breeding of mosquitoes in barracks all drains were thoroughly overhauled, and some new ones constructed to lead away wash-house water to a distance from the barracks, thus replacing the old garden method which was considered objectionable.

Hyderabad.—Additional taps and water-pipes will be provided for lavatories and bath rooms in barracks.

QUETTA DISTRICT.—*Quetta.* A Government dairy and a hospital laundry have been taken into use. All mud latrines have been replaced by galvanized iron ones, and an additional water supply, on the constant supply system, has been provided. A summer camp at Ziarat was opened and the troops sent there derived great benefit from the change. Additional accommodation for the increased hospital establishment is noted.

ADEN DISTRICT.—*Aden.* The ventilation of the latrines has been improved by making openings in the walls.

Surahis have been substituted for *ghurrahs.* Brackish water is supplied for washing purposes, and condensed water has been recommended as a substitute. The extension of surface drainage has been completed, and all catch-pits filled in. A *dhobies ghat* is being constructed on Telegraph Bay so that all *dhobies* may be removed from Tarshyne. The accommodation at the station hospital is insufficient, this question is under consideration. A piped water supply for the garrison has been recommended.

XVIII.—ON THE HEALTH OF THE TROOPS SERVING IN EGYPT AND CYPRUS.

I. British Troops.

Sickness and Mortality.

Egypt and Cyprus.

The average strength of British troops serving in the Command during the year, exclusive of those attached to the Egyptian Army, was 4,954 warrant officers and non-commissioned officers and men, of whom 4,851 were stationed in Egypt and 103 in Cyprus. The force was greater in Egypt by 653, and in Cyprus by 2, than in 1902.

The troops in Egypt throughout the year comprised the 56th Battery Royal Field Artillery, No. 2 Company Royal Engineers, the 2nd Battalion Royal Berkshire Regiment, the 2nd Battalion Rifle Brigade, Mounted Infantry, the 71st Company Army Service Corps, the 7th Company Army Ordnance Corps, and detachments of the Royal Army Medical Corps, Army Pay Corps, and General Staff.

Taking the Command as a whole, the arrivals consisted of the 20th Hussars from South Africa in April; No. 4 Mountain Battery, Royal Garrison Artillery, from South Africa in February; the 2nd Battalion Royal Inniskilling Fusiliers and the 1st Battalion Highland Light Infantry, both from South Africa, in November and February respectively; and the 1st Battalion Royal Dublin Fusiliers, from Malta in March.

The troops leaving the Command were the 11th Hussars, to England, in April; No. 74 Company, Royal Garrison Artillery, to India, in January; the 3rd Battalion Royal Fusiliers, to Bermuda, in November; the 2nd Battalion Leicester Regiment, to England, in January; the 1st Battalion Seaforth Highlanders, to India, in January; and the 2nd Battalion Cameron Highlanders, to Malta, in March.

The force in Cyprus consisted of a detachment of the 2nd Battalion Cameron Highlanders, who were relieved in March by a detachment of the 1st Battalion Royal Dublin Fusiliers.

The head quarters and 6 companies of the 3rd Battalion Royal Fusiliers were stationed at Khartum till the end of October, when they were relieved by a similar strength of the 1st Battalion Highland Light Infantry. The infantry regiment at Khartum is changed annually.

In the following table the admission, mortality, and invaliding rates, &c., for the whole of the troops in the Command are shown, as well as those for Egypt and Cyprus separately:—

1903.	Average Strength.	Admissions.	Deaths.			Invalids.	
			In the Command.	Of Invalids.	Total.	Sent Home.	Finally Discharged.
Egypt	4,851	3,591	24	1	25	72	35
Cyprus	103	117	—	—	—		
Command	4,954	3,708	24	1	25	72	35

(*continued.*)

1903.	Constantly Sick.	Ratios per 1,000 of Strength.				
		Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
Egypt	215·21	740·3	5·15	14·53	7·07	44·36
Cyprus	5·18	1135·9	—			50·29
Command	220·39	748·5	5·05	14·53	7·07	44·49

The admission and constantly sick ratios for the whole Command were higher by 72·3 and ·84 per 1,000, and the mortality ratio lower by 6·35 per 1,000 than the corresponding rates in the previous year, while there was a decrease as compared with the decennial average ratio of 167·2, 17·39, and 8·32 per 1,000 respectively. The average sick time to each soldier was 16·24 days, which is longer than in the previous year by ·31 of a day, but shorter than the decennial period by 6·35 days. The average duration of each case of sickness, 21·69 days, is shorter than in the preceding year and than the decennial period by 1·87 and 2·97 days respectively.

Taking Egypt alone, as compared with 1902, the admission rate has increased by 66·9, the mortality rate has decreased by 6·28, and the constantly sick rate has increased by ·34 per 1,000, while they are lower than the decennial average ratios by 184·3, 8·62, and 18·53 respectively. The average sick time to each soldier was 16·19 days, as compared with 16·07 in the preceding year, and with 22·95, the average for the decennial period. The average duration of each case of sickness, 21·87 days, is shorter than in the previous year by 1·99 days, and than the average for the preceding ten years by 2·96 days.

The health statistics of the stations in Egypt occupied by British troops are given below :—

Stations.	Average Strength.	Admissions.	Deaths.	Ratio per 1,000.	
				Admissions.	Deaths.
Cairo	3,109	2,207	14	709·8	4·50
Alexandria	1,070	679	8	634·5	7·48
Khartum	672	705	2	1,049·1	2·98

Comparing the ratios in each station with those for 1902, it is found that the admission rate has decreased in Alexandria by 174·1, while the ratio in Cairo has increased by 85·9 and in Khartum by 276·4, while the death rate has decreased in each station by 4·35, 6·08, and 9·42 per 1,000 respectively.

The admission and constantly sick rates for the garrison quartered in Cyprus are higher than in 1902 by 343·8 and 22·07 per 1,000 respectively, and than the average ratios for the ten years 1893–1902 by 401·4 and 9·10 respectively. The death rate was *nil*, as compared with 9·90 per 1,000 in the previous year, and 5·21 the decennial average rate. The average sick time to each soldier, 18·35 days, is longer than in the previous year by

Egypt and Cyprus.

8·05 days, and than the average period by 3·31 days. The average duration of each case of sickness was 16·16 days, which is longer than in the previous year by 3·16 days, but shorter than the average period by 4·31 days.

In Abstract XXXIV is a table showing the health statistics for the various regiments and corps which served in the Command during the year.

In the Cavalry, the admission, mortality and constantly sick rates were 701·3, 6·64, and 44·45 per 1,000 respectively, as compared with 516·6, 19·49, and 33·37 in 1902. In the Artillery these rates were 799·4, 9·55, and 52·36 per 1,000, as compared with 538·7, 2·98, and 37·26 in the previous year. For the Engineers the rates were 386·1, *nil*, and 21·88 per 1,000. For the Infantry the rates were 795·1, 4·23, and 46·51 per 1,000, showing an increase in the admission rate of 41·7, and a decrease in the mortality and constantly sick ratios of 6·73 and 2·24 respectively. The ratio for the various corps under Garrison Staff and Departments equalled 305·9, 9·87, and 18·75, the corresponding ratios in the previous year being 322·2, 38·96, and 19·58.

Taking separate corps, and excluding those whose average annual strength was under 100 men, the highest admission rate was 1,025·0 per 1,000 in the 3rd Battalion Royal Fusiliers, followed by 978·4 per 1,000 in No. 4 Mountain Battery, Royal Garrison Artillery. The lowest admission rates were 390·6 per 1,000, in the 11th Hussars, the next lowest being 417·5 per 1,000 in the Royal Army Medical Corps (average annual strength 103).

Mortality was highest, 19·42 per 1,000, in the Royal Army Medical Corps (2 deaths), followed by 12·12 per 1,000, in the 56th Battery, Royal Field Artillery (2 deaths). The lowest death rates (excluding corps in which no death occurred) were 1·15 and 5·46 per 1,000, in the 2nd Battalion Rifle Brigade and the 2nd Battalion Berkshire Regiment respectively.

The highest constantly sick rate was 57·12 per 1,000 in No. 4 Mountain Battery, Royal Garrison Artillery, the next highest being 55·18 per 1,000 in the 3rd Battalion Royal Fusiliers. The lowest ratio was 17·38 per 1,000 in the Royal Army Medical Corps, followed by 24·52 per 1,000 in the 2nd Battalion Royal Inniskilling Fusiliers.

The sickness and mortality among the troops, arranged according to the ages of the men, are shown in the following table :—

Ages.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 20 years ..	503	304	2	8	604·4	3·98	15·90
From 20 to 25 years ..	2,953	2,547	14	39	862·5	4·74	13·21
„ 25 „ 30 „ ..	1,077	708	5	9	657·4	4·64	8·36
„ 30 „ 35 „ ..	291	101	1	9	347·1	3·44	30·93
„ 35 „ 40 „ ..	106	33	2	5	311·3	18·87	47·17
Over 40 years ..	24	15	—	2	625·0	—	83·33
Total ..	4,954	3,708	24	72	748·5	4·84	14·53

The highest ratio of admission was among men between 20 and 25 years of age, the next highest being among men between 25 and 30 years of age. In 1902, the highest admission was, as in the year under report, among men between 20 and 25 years, but the next highest was among men under 20 years of age.

With regard to the influence of service in the Command on sickness and mortality amongst the troops, the following table has been compiled :— *Egypt and Cyprus.*

Length of Service in Command.	Average Strength.	Admissions.	Deaths in Command.	Invalids.	Ratio per 1,000.		
					Admissions.	Deaths.	Invaliding.
Under 1 year ..	3,234	2,684	20	53	829·9	6·18	16·39
From 1 to 2 years..	850	508	1	8	597·6	1·18	9·41
„ 2 „ 3 „ ..	491	400	1	5	814·7	2·04	10·18
„ 3 „ 4 „ ..	125	41	—	—	328·0	—	—
„ 4 „ 5 „ ..	145	53	2	4	365·5	13·79	27·59
„ 5 „ 10 „ ..	90	22	—	2	244·4	—	22·22
Over 10 years ..	19	—	—	—	—	—	—
Total ..	4,954	3,708	24	72	748·5	4·84	14·53

It will be observed that the highest admission rate was among men in their first year, the ratios for the succeeding periods of service falling and rising alternately until the "over 10 years'" period is reached in which there was no admission.

In 1902 the highest admission rate was, as in the year under review, furnished by men in their first year, the ratios for the succeeding periods of service, with the exception of men with over 10 years' service, showing a steady decline.

In Abstract XXX is a table showing the principal statistics of sickness and mortality according to the various sections of disease.

General Diseases.—There was 1 admission for *small-pox* which proved fatal. The source of infection could not be traced. Under the heading of *other eruptive fevers* there were 2 admissions, 1 each for scarlet fever and rubella, or a ratio of ·4 per 1,000, as compared with 1·9 in 1902, and 2·6 the decennial average rate.

Influenza caused 20 admissions, the equivalent ratio being 4·0 per 1,000, as against 25·3 in the preceding year, 17 of the cases occurred at Alexandria and 3 at Cairo. For *diphtheria* there were 3 admissions, all at Cairo, as compared with 5 admissions, at the same station, in the previous year. The cause of the disease could not be definitely ascertained. Anti-diphtheritic serum was used with benefit.

Enteric Fever caused 21 admissions, or a ratio of 4·2 per 1,000, which is lower than the rate in the previous year and the decennial average ratio by 14·2 and 19·3 respectively. The deaths numbered 4, giving a ratio of ·81 per 1,000, which is lower than in the previous year by 2·68, and than the decennial average rate by 4·97. The percentage of mortality to attack was 19·1, as compared with 19·0 in 1902 and 24·6, the average percentage for the ten years 1893–1902. Of the cases 9 were admitted at Cairo, 9 at Alexandria, and 3 at Khartum, as compared with 48, 21 and 10 respectively in the previous year. As in the previous year there was no admission for this disease at Cyprus. The ratio of constantly sick was 1·06 per 1,000, as compared with 3·59 in 1902, and 4·17 the ten years' average rate.

The relative sickness and mortality from enteric fever in Cairo and Alexandria were as follows :—

Stations.	Average Strength.	Admissions.	Deaths.	Ratio per 1,000.	
				Admissions.	Deaths.
Cairo	3,109	9	2	2·9	·64
Alexandria	1,070	9	2	8·4	1·87
Total	4,179	18	4	4·3	·96

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Of the cases at Cairo 5 came from Abbassiyeh, 2 from the Citadel, 1 from Kasr-el-Nil and 1 from the Town. The case at Kasr-el-Nil was transferred from the transport "Plassey" with influenza and was found to be suffering from enteric fever. At Alexandria, which for the sixth successive year furnished the highest admission rate, the cases were distributed as follows: 5 from Mex Camp (a musketry camp), 3 from Mustapha Barracks, and 1 from the Station Hospital, the latter being probably contracted whilst employed nursing enteric fever cases. No direct cause of infection could be discovered, though in some instances contaminated water appeared to be responsible for the disease. Increased vigilance in sanitation has been observed and special attention directed to boiling water for drinking purposes.

At Khartum 1 of the cases was suspected to be due to eating ice-cream manufactured in the town; in the remaining 2 cases the cause of infection could not be traced.

The following tables show the enteric fever admissions and deaths in Egypt, according to age and length of service in the Command:—

Age.	Average Strength.	Admissions.	Deaths.	Ratio per 1,000.	
				Admissions.	Deaths.
Under 20 years	503	2	—	4·0	—
From 20 to 25 years ..	2,953	12	3	4·1	1·02
„ 25 „ 30 „ ..	1,077	6	1	5·6	·93
„ 30 „ 35 „ ..	291	—	—	—	—
„ 35 „ 40 „ ..	106	1	—	9·4	—
Over 40 years	24	—	—	—	—
Total	4,954	21	4	4·2	·81

Length of Service in Command.	Average Strength.	Admissions.	Deaths.	Ratio per 1,000.	
				Admissions.	Deaths.
Under 1 year	3,234	13	3	4·0	·93
From 1 to 2 years ..	850	3	—	3·5	—
„ 2 „ 3 „ ..	491	3	—	6·1	—
„ 3 „ 4 „ ..	125	—	—	—	—
„ 4 „ 5 „ ..	145	2	1	13·8	6·90
„ 5 „ 10 „ ..	90	—	—	—	—
Over 10 years	19	—	—	—	—
Total	4,954	21	4	4·2	·81

The following table shows the monthly prevalence of enteric fever amongst the troops in the Command:—

	Alexandria.		Cairo.		Khartum.		Total.	
	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
January ..	—	—	—	—	—	—	—	—
February ..	1	—	1	—	—	—	2	—
March ..	1	—	—	—	1	—	2	—
April ..	—	—	1	—	—	—	1	—
May	3	—	2	1	1	—	6	1
June	2	1	1	1	—	—	3	2
July	2	—	1	—	—	—	3	—
August ..	—	1	1	—	—	—	1	1
September ..	—	—	2	—	1	—	3	—
October ..	—	—	—	—	—	—	—	—
November ..	—	—	—	—	—	—	—	—
December ..	—	—	—	—	—	—	—	—

Other Continued Fevers caused 343 admissions, all for simple continued fever, the admission ratio, 69·2 per 1,000, being higher than in the previous year by 39·4, but lower than the average ratio for the ten years 1893–1902 by 6·4. Of the total cases Cairo contributed 227 admissions, Khartum 70, Alexandria 41, and Cyprus 5.

Dysentery caused 26 admissions, or a ratio of 5·3 per 1,000, which is lower than the previous year's and the decennial average rates by 9·6 and 14·0 respectively. Twelve of the cases occurred at Cairo, 11 at Alexandria (1 fatal), and 3 at Khartum. There were no admissions for this disease at Cyprus.

Malarial Fevers gave 23 admissions, comprising 21 of ague and 2 of remittent fever. The admission ratio equalled 4·6 per 1,000, as compared with 3·0 in the previous year, and 24·0 the decennial average rate. Eleven of the cases were admitted at Cairo, 9 at Khartum, and 3 in Cyprus. The cases at Cairo were considered to have been contracted elsewhere.

Tubercular Diseases accounted for 4 admissions and 2 deaths, the latter including an invalid who had left the Command. The admission rate was ·8 per 1,000, which is lower than the rate in the previous year by 4·5, and than the decennial average rate by 2·8. All the cases and both the deaths were returned as tubercular disease of the lungs. The open-air treatment is carried out as much as possible, and at Cairo there is a very suitable position, well elevated and overlooking the town, and the air is exceptionally pure, except during the late spring and early summer, when dust-storms are prevalent. During the winter months cases are stated to do remarkably well at this station.

Venereal Diseases.—There were 41 admissions for *primary syphilis*, equal to a ratio of 8·3 per 1,000, which is higher than the rate for 1902 by 4·6, but lower than the decennial average rate by 25·5. The number of men constantly sick was 3·47, the equivalent ratio being ·70 per 1,000, as compared with ·35 in the previous year, and 3·27 the decennial average rate. If to this be added the sickness from soft chancre, for which there were 530 admissions and 37·73 men constantly sick, the total admission ratio for primary venereal sores equalled 115·3 per 1,000, and that of constant inefficiency 8·32, both being higher than the corresponding ratios in the preceding year by 36·7 and 1·70 respectively, but lower than the average rates for the preceding ten years by 15·4 and 2·28.

Secondary syphilis, with 108 admissions and 9·28 men constantly sick, gave ratios of 21·8 and 1·87 per 1,000 respectively. The admission rate is higher than in 1902 by 9·0, but lower than the decennial average rate by 18·1,

Egypt and Cyprus.

while the constantly sick rate is also higher than in the preceding year by ·75, and lower than the decennial average rate by 2·24. Intra-muscular injections of mercury were administered in most cases, and much benefit was derived. There were no ill effects observed, with the exception of a few mild cases of mercurial stomatitis, which soon disappeared on leaving off the injections for a time, and there were also a few cases of swelling at the sites of injection.

Gonorrhœa was the cause of 743 admissions, equal to a ratio of 150·0 per 1,000, showing an increase as compared with the previous year's ratio of 63·0, and in comparison with the decennial average rate 43·2. The ratio of constantly sick, 10·55 per 1,000, is higher in the former comparison by 3·87, and in the latter by 2·80.

Including all forms, the total admission rate for venereal diseases was 287·0 per 1,000, which is higher than the rate in 1902 by 108·6, and than the average rate for the preceding ten years by 9·6. The constantly sick rate, 20·74 per 1,000, is higher in the former comparison by 6·31, but lower in the latter by 1·7.*

The following table shows the prevalence of venereal diseases by stations in the Command :—

Station.	Average Strength.	Admissions.	Constantly Sick.	Ratio per 1,000.	
				Admissions.	Constantly Sick.
Cairo	3,109	814	59·48	261·8	19·13
Alexandria	1,070	202	18·92	188·8	17·68
Khartum	672	359	21·82	534·2	32·47
Cyprus	103	47	2·52	456·3	24·47
Total ..	4,954	1,422	102·74	287·0	20·74

It will be noticed that the majority of admissions occurred at Cairo and Khartum, and at the former station the cause was attributed chiefly to the change of the garrison, which took place during the early months of the year, the troops from South Africa importing a considerable amount of the disease with them. At Khartum the disease was chiefly contracted at that station, but some cases were brought from Cairo.

Parasitic Diseases were the cause of 51 admissions, giving a ratio of 10·3 per 1,000, which is higher than the rate in the previous year by 2·4, and than the decennial average rate by 1·7. The admissions comprised 28 of scabies, 8 of phthirius inguinalis, 6 of tænia solium, 4 of bilharzia hæmatobia, 2 each of acanthia lectularia and ringworm, and 1 of culex anxifer.

Alcoholism caused 12 admissions, equal to a ratio of 2·4 per 1,000, as compared with 2·1 in the preceding year, and 2·1, the average rate for the ten years 1893–1902. Eleven of the cases, 1 of which resulted fatally, were recorded as alcoholism and 1 as delirium tremens.

Rheumatism.—Under this heading there were 82 admissions, including 9 for rheumatic fever. The admission ratio, 16·6 per 1,000, is lower than in the preceding year by ·6, and than the average rate by 7·3. There was no death.

Debility caused 59 admissions, or a ratio of 11·9 per 1,000, as compared with 14·9 in 1902.

Under *other general diseases* there were 35 admissions recorded, comprising 26 cases of non-malignant new growth, chiefly papilloma, 5 of cyst, 2 of anæmia, and 2 of congenital malformation (hammer toe).

Local Diseases.—*Diseases of the Nervous System* gave 35 admissions, or a ratio of 7·1 per 1,000, which is lower than the previous year's and decennial average rates by 2·7 and 3·0 respectively. The cases included 20 of neuralgia, 3 of epilepsy, 2 each of multiple neuritis, melancholia, and

* There were no admissions for ulcer of penis of non-venereal origin.

delusional insanity, and 1 case each of meningitis, chorea, vertigo, stammering, mania, and mania alcoholic. A death occurred from meningitis.

Diseases of the Eye, with 67 admissions, furnished a ratio of 13·5 per 1,000, which is lower than the previous year's rate and than the decennial average ratio by 1·8 and 13·1 respectively. Fifty-nine of the cases were recorded under the head of conjunctivitis.

Diseases of the other Organs of Special Sense caused 55 admissions, all of which, with two exceptions, were cases of aural affection. The admission ratio was 11·1 per 1,000, as compared with 15·6 in 1902, and 15·1 the ten year's average rate. Of the cases, 30 were returned as inflammation of the external meatus, and 13 as inflammation of the membrana tympani.

Diseases of the Circulatory System with 32 admissions gave a ratio of 6·5 per 1,000, being lower than the rate in 1902 by 4·0 and fractionally lower than the decennial average rate The admissions comprised 19 of disordered action of heart, 5 of varix, and 4 each of valvular disease of heart and syncope. There was 1 death, due to valvular disease of heart.

Diseases of the Respiratory System caused 79 admissions with 1 death. The admission ratio equalled 15·9 per 1,000, and is practically identical with the previous years' rate, but is lower than the decennial average ratio by 17·3. The cases included 58 of bronchitis, 17 of pneumonia, 2 of pleurisy, and 1 each of laryngitis and emphysema. The death was due to pneumonia.

Diseases of the Digestive System.—Under this heading there were recorded 378 admissions and 2 deaths, the admission ratio, 76·3 per 1,000, being lower than the rate in 1902 by 29·3 and than the average rate for the preceding ten years by 35·5. The diseases causing the majority of the admissions were mouth and throat affections 199, diarrhœa 52, dyspepsia 32, hepatic diseases 24, colic 23, piles 19, and inflammation of intestines 9. The deaths were due to abscess of liver, the mortality ratio being ·40 per 1,000, as compared with ·70 in the previous year, and 1·10, the decennial average rate.

Diseases of the Lymphatic System gave 41 admissions, or a ratio of 8·3 per 1,000, which shows a decrease as compared with the previous year's and the decennial average rates of 8·9 and 7·4 respectively. All the cases were due to inflammation of the lymphatic glands.

Diseases of the Urinary System caused 8 admissions, equal to a ratio of 1·6 per 1,000, as compared with 1·2 in 1902, and 1·4, the average rate. The admissions comprised 3 of incontinence of urine, and 1 case each of nephritis, Bright's disease, albuminuria, cystitis, and irritability of bladder. One death occurred, due to nephritis.

Diseases of the Generative System furnished 613 admissions, equivalent to a ratio of 123·7 per 1,000, which is higher than the previous year's rate by 32·5, and than the decennial average ratio by 10·6. In addition to the 530 cases of soft chancre, already referred to under the heading of venereal diseases, the admissions included 41 of balanitis, 28 of orchitis, 9 of phimosis, 2 of stricture of urethra, and 1 each for abscess of prostate, paraphimosis, and varicocele.

Diseases of the Organs of Locomotion, with 64 admissions, gave a ratio of 12·9 per 1,000, which is lower than the previous year's rate by 4·1, but higher than the decennial average rate by 1·8. Synovitis, for which there were 40 admissions, caused the majority of the admissions.

Diseases of the Connective Tissue accounted for 152 admissions, or a ratio of 30·7 per 1,000, which is higher than the previous year's and the decennial average rates by 3·5 and 5·2. Eighty-six of the cases were returned as inflammation, and 66 as abscess.

Diseases of the Skin gave 195 admissions, equivalent to a ratio 39·4 per 1,000, which is higher than the previous year's rate by 5·0, but lower than the decennial average rate by 5·6. Boils 85 cases, eczema 45, ulcer 19 and onychia 16 cases, furnished the majority of the admissions.

Egypt and Cyprus.

INJURIES.—There were 374 admissions and 9 deaths, equal to ratios of 75·5 and 1·82 per 1,000, the former being higher than the rate in the previous year by 22·0, but lower than the decennial average rate by 5·8, while the latter is higher in both comparisons by ·19 and ·12 respectively.

For *general injuries* there were 9 admissions, 5 from multiple injury, and 4 from heat-apoplexy. Five deaths were recorded, viz., 2 from heat-apoplexy (1 at Cairo and 1 at Khartum), 2 from suffocation from submersion (1 at Cairo in which a verdict of "misadventure" was returned, and 1 at Alexandria, the verdict in which was "accident whilst bathing") and 1 from multiple injury sustained by a man who climbed over the verandah at Kasr-el-Nil while asleep.

Under *local injuries* there were 365 admissions, including 111 for contusions, 90 for wounds, 77 for sprains, 42 for abrasions, and 22 for fractures. There was also a case of concussion of brain which recovered. Two cases of self-inflicted injury occurred, one a man who attempted to cut his throat with a razor and has since been brought before an invaliding board on account of delusional insanity. The other was a man who committed suicide at Khartum by shooting himself with a rifle; no motive could be assigned and the opinion of the court of inquest was "temporarily insane." In addition to the latter case, there were two deaths from fracture of skull (one caused by being pitched from a cart and the other by a fall from a height), and there was one from rupture of bladder.

POISONS.—There were 30 admissions under this head, 28 of which, due to ptomaine poisoning, were admitted at Alexandria from Mustapha Barracks, and in addition several cases of a slight nature, not necessitating admission to hospital, were treated in barracks. The cause of the disease was meat obtained from the regimental coffee bar. The chief characteristics were severe gastro-intestinal irritation and collapse. Three of the cases were very severe but all eventually made good recoveries. There were also 2 cases of alcoholic poisoning at Cairo (methylated spirits being the poison in one case), both of which made a speedy recovery. One death occurred from cocaine poisoning in a man who had been in the habit of using this drug, and who had evidently taken an overdose while under the influence of liquor; the opinion recorded at the inquest was "death from misadventure."

SURGICAL OPERATIONS.—A statement of the principal surgical operations performed during the year is subjoined, following the classification of the nomenclature of diseases:—Operations on tumours (2), on cysts (4), evacuation of abscesses (10), operations on veins (2), on the lymphatic organs (29), on the skin (4), on bones (3), on joints (2), on muscles (1), amputations (3), operations on skull and brain (2), on the mouth (1), on the eye (1), on the larynx (1), on the thorax and breast (1), on the abdomen (8), on the rectum and anus (10), on the bladder and urethra (3), and on the male generative organs (47). The operations on veins were both for varix and the operations on the lymphatic organs were mainly for extirpation of inguinal glands. The operations on bones were incision of periosteum and grooving of bone in a case of wound of leg, incision over external malleolus and scraping of left fibula for periostitis and exploration and drainage of a cavity behind the rib in a case of necrosis. The amputations were 1 each of arm, finger, and toes. The operations on the skull were for removal of necrosed bone from skull, caused by secondary syphilis, and trephining through frontal bone in two places for removal of depressed fragments in a case of fracture of vault of skull. The operation on the eye was one of excision of eyeball; on the larynx, one of plastic operation for closure of tracheal fistula; and on the thorax, one of aspiration in a case of pleurisy. The operations on the abdomen were 6 for abscess of liver; 1 in a case of enteric fever in which the bowel was sutured, and 1 a modified Bassini's operation for hernia. The operations on the rectum and anus consisted chiefly of ligature for piles; those on the bladder and urethra were 2 for stricture of urethra and 1 for rupture of bladder in which the bladder was sutured. The operations on the male generative organs comprised 19 for soft chancre, 14 for gonorrhœa, 6 for phimosis, 3 for

primary syphilis, 2 for secondary syphilis, 2 for balanitis, and 1 for varicocele. Death resulted in 3 instances, viz., after the operations for suture of lower bowel (general peritonitis supervening), abscess of liver, and in the case of ruptured bladder which was complicated with cirrhosis of liver and cerebral hæmorrhage. With the exception of two cases in which chloroform and ether was employed, chloroform was the anæsthetic used. *Egypt and Cyprus.*

INVALIDING.—There were 72 men sent home to the United Kingdom during the year, equal to a ratio of 14·53 per 1,000, which is lower than that for 1902 by 10·36, and than the average rate for the ten years 1893–1902 by 18·89.

The highest invaliding rate for any arm of the service was 25·48 per 1,000 in the Royal Artillery, followed by 14·80 per 1,000 in the Infantry. The Cavalry furnished the lowest rate, 8·85 per 1,000, the next lowest being 9·87 per 1,000 in the Garrison Staff and Departments. In individual corps, with an average strength of not less than 100 men, the highest invaliding ratio was 28·78 per 1,000 in the No. 4 Mountain Battery, Royal Garrison Artillery, the next highest being 25·11 per 1,000 in the 2nd Battalion, Royal Berkshire Regiment, followed by 18·39 per 1,000 in the 2nd Battalion, Rifle Brigade, and 18·18 per 1,000 in the 56th Battery, Royal Field Artillery. The lowest invaliding ratio was 4·37 per 1,000 in the 1st Battalion, Highland Light Infantry, the next lowest being 7·81 per 1,000 in the 11th Hussars followed by 9·26 per 1,000 in the 20th Hussars. There was no case of invaliding among the Mounted Infantry, strength 121, or in the 2nd Battalion, Royal Inniskilling Fusiliers, strength 146.

As to the ages of the men invalided, 8, or 15·90 per 1,000, occurred among men under 20 years of age; 39, or 13·21 per 1,000, among men between 20 and 25 years; 9, or 8·36 per 1,000, among men between 25 and 30 years; 9, or 30·93 per 1,000, among men between 30 and 35 years; 5, or 47·17 per 1,000, among men between 35 and 40 years; and 2, or 83·33 per 1,000, among men over 40 years of age. The corresponding ratios in the previous year were 13·68, 24·93, 23·58, 56·20, 56·82, and 83·33 respectively. Taking service in the Command, 53 men, or 16·39 per 1,000, were in their first year of service; 8, or 9·41 per 1,000, were in their second year; 5, or 10·18 per 1,000, were in their third year; there were no cases in the fourth year period; 4, or 27·59 per 1,000, were in their fifth year; 2, or 22·22 per 1,000, had between five and ten years; and no cases of invaliding occurred among men who had been over ten years in the Command. In 1902 the corresponding ratios were 28·65, 22·96, 22·51, 21·34, 18·59, 36·70, and 333·33 respectively.

The principal causes of invaliding were:—diseases of the nervous system 14 cases (including 6, or 1·21 per 1,000, for mental disorder), giving a ratio of 2·83 per 1,000; diseases of other organs of special sense 8 cases (all aural affections), or 1·62 per 1,000; rheumatism 7 cases, or 1·41 per 1,000; diseases of the circulatory system 7 cases (comprising 4 for disordered action and 3 for valvular disease of heart), or 1·41 per 1,000; and digestive diseases 6 cases, or 1·21 per 1,000.

The number of men discharged the service as medically unfit was 35, equal to a ratio of 7·07 per 1,000, as compared with 14·65 in the preceding year, and 12·39 the decennial average rate. The chief causes of discharge were:—nervous disorders 7 cases (including 1 case of mental affection); diseases of organs of special sense 7 cases (6 being for aural affections); circulatory diseases 6 cases (comprising 5 cases of valvular disease and 1 of disordered action of the heart); and 4 cases of bilharzia hæmatobia.

RECRUITS.—Seven recruits, all of whom were found fit, were inspected for the regular forces during the year.

OFFICERS.—The average strength was 158, and there were 99 admissions, equal to a ratio of 626·6 per 1,000, as compared with 550·7 in the preceding year. There were 5 admissions for enteric fever (3 at Cairo and 2 at Alexandria); 1 of the Alexandria cases probably contracted the disease at Cairo. The origin of the disease could not be ascertained in any of the cases,

Egypt and Cyprus.

all of which were invalided to the United Kingdom on sick leave for various periods. There was also 1 case of dengue and 1 of Mediterranean fever. Amongst the remaining admissions were 22 of simple continued fever, 22 of injuries, and 15 of digestive disorders. There were no deaths, and in addition to the cases of enteric fever referred to above, 1 case of Mediterranean fever and 1 of alcoholic mania were invalided.

WOMEN.—In an average strength of 171 there were 126 admissions, the equivalent ratio being 736·8 per 1,000, or lower than the rate in the previous year by 146·2. No deaths occurred, as compared with 2, or 11·75 per 1,000, in 1902. The chief causes of admission were:—debility 30 cases, digestive disorders 21, rheumatism 10, simple continued fever 6, conjunctivities and respiratory affections 5 each, and diseases incidental to women 27. There were 3 cases of enteric fever, 2 of which occurred at Cairo and 1 at Alexandria, the latter remaining under treatment at the end of the year. Of the 2 at Cairo, 1 occurred at Abbassiyeh, and was possibly caused by eating unwashed lettuce, while the other was admitted to hospital a few days after arrival at the station, and might have contracted the disease on the journey from Port Said. Both these cases were treated in the Civil Hospital, and both recovered.

CHILDREN.—The average strength was 275, and there were 232 admissions and 12 deaths, equal to ratios of 843·6 and 43·64 per 1,000, as compared with 620·3 and 33·83 in the preceding year. The principal causes of sickness were:—conjunctivitis 48 cases, diarrhœa 26, bronchitis 25, debility 17, simple continued fever 13, measles 11, and parasitic diseases, disorders of dentition, and injuries 9 cases each. Of the 11 cases of measles, 6 were admitted at Alexandria, and were observed in families arriving from England by the ss. "Circassia," on which ship the disease originated. The remaining 5 cases occurred at Cairo in families from the same ship. In addition to measles there were 3 cases of chicken-pox and 1 of scarlet fever, making a total of 15 cases of eruptive fevers. Enteric fever caused 4 admissions in the same family as the woman admitted from Abbassiyeh with this disease; every attempt was made to trace the origin, but without success. The cases were treated at the Civil Hospital, and all recovered. The deaths were 3 from disorders of dentition, 2 from debility, and 1 each from measles, epidemic diarrhœa, immaturity at birth, congenital malformation, eclampsia, suffocation from overlaying, and burns.

VACCINATION.—During the year there were 866 re-vaccinations among the men, with 338 perfect results, 401 modified results, and 127 failures. There were 5 re-vaccinations among recruits, 2 of which resulted in failure. Amongst the women there were 25 re-vaccinations, 3 of which were failures, and of 41 primary vaccinations and 41 re-vaccinations among the children, the former were all successful, and failure only resulted in 4 instances in the latter. The majority of the vaccinations were performed with lymph obtained from the Egyptian Sanitary Department.

II. ROYAL MALTA ARTILLERY.

The average strength of the company of Royal Malta Artillery serving in Egypt was 118. The Head Quarters of the company were removed from Cairo to Alexandria in January, only a detachment being left at the former station. The total admissions amounted to 114, equal to a ratio of 966·1 per 1,000, as compared with 983·2 in 1902. There was no death. The average sick time was 22·55 days, and the average duration of each case of sickness, 23·34 days, as compared with 19·88 days and 20·22 days respectively in the previous year.

Small-pox caused 1 admission, contracted in the town of Alexandria, through visiting a relative suffering from the disease. There were 6 cases of influenza, 13 of simple continued fever, and 1 each of Mediterranean fever and dysentery. Venereal diseases accounted for 45 admissions,

including 2 cases of primary syphilis, 7 of secondary syphilis, 30 of gonorrhœa, and 6 of soft chancre. Among the remaining admissions were 3 each of rheumatism, debility, hernia, and inflammation of lymphatic glands. Local injuries furnished 7 admissions. One case of debility was invalided to Malta for change.

The average strength of officers was 4, among whom there was 1 admission on account of influenza.

In an average strength of 9, there were 11 admissions among the women, 6 being due to debility, 4 to diseases peculiar to women, and 1 to rheumatism. Among the children, with an average strength of 21, there were 13 admissions and 1 death; of the former 4 were due to inflammation of the stomach, 3 to conjunctivitis, 2 to bronchitis, and 1 each to measles, debility, influenza, and disorders of dentition. The death was due to debility.

Fifteen recruits presented themselves for inspection, and 7 were found fit. Of the 8 rejected 4 were under chest measurement, 2 under weight, 1 under height, and 1 was rejected on account of defective vision. Three of the 7 found fit were unable to read. There were 7 re-vaccinations with 2 failures, among recruits; 46, with 9 failures, among the men: and 3, all successful, among the women. Two primary vaccinations and 1 re-vaccination among the children were all successful.

Sanitary Conditions.

The Principal Medical Officer (Colonel W. A. May, C.B., R.A.M.C.) notes the following points in connection with the sanitary reports from the various stations in the Command.

Cairo.—The water supply is obtained from the Nile, and is very muddy when the river is high. A new source will be, it is hoped, available next year, deep wells being in process of construction. At present the drinking water is either boiled or filtered. The dry earth system of conservancy is universally in use, and the conversion to water carriage cannot be made until the town itself is drained. At Abbassiyeh through ventilation has been provided in the prisoners' room and cells at Main barracks. A water tower has been erected, thus providing a supply of water to the upper floors. At Kasr-el-Nil a new block of married quarters has been completed and is in occupation. A steam disinfector is noted as being necessary at the station hospital.

Alexandria.—The water supply is bad. Deep wells are useless, as they soon become brackish. The Water Company derives its supply from the Mahmoudieh Canal, which is not in a satisfactory condition, and the filter beds are utterly inadequate in area and depth to effectively deal with the water. A new system is to be adopted, and new beds are now being constructed, the water undergoing a previous treatment with alum, when it is hoped that a much better supply will result. Asphalt and concrete are not considered satisfactory for floors, as the former is too soft in warm weather and the latter is apt to crack, and a new flooring of patent cement tiles is to be tried in the cookhouse at the Military Police Barracks. At the station hospital the drainage has been completed, and all w.c.'s are now on the water carriage system. A steam disinfector and a small isolation hospital are necessary.

Khartum was occupied throughout the year as a station for British troops. Additional accommodation has been provided during the year. The water supply is good. It is pumped from a deep well to a water tower, and distributed in pipes. The well needs better protection from dust and dirt, and this is to be remedied. Quarters are being provided for nursing sisters at the station hospital, and electric punkahs have been placed in the wards.

Cyprus.—The Medical Officer reports that the past season was a very healthy one, and, as in former years, the health of the troops in general was very satisfactory. No special improvements or defects in the sanitary condition are noted.

XIX.—ON THE HEALTH OF THE TROOPS ON BOARD SHIP.

Troops on board Ship.

The troops embarked during the year, as shown by the returns received at headquarters, were :—

I.	Troops proceeding on service abroad - - -	25,102
II.	Troops returning from abroad - - -	34,338
III.	Troops proceeding from one station abroad to another	14,697
IV.	Invalids returning to England - - - -	4,157

I.—Troops Proceeding on Service Abroad.

The total number of warrant officers, non-commissioned officers and men embarked for foreign service during the year was 25,102, the equivalent annual strength being 1,544. There were 1,471 admissions into hospital and 2 deaths, being in the annual ratio of 952·7 and 1·30 per 1,000 respectively.

The admission rate is higher than the corresponding ratio for 1902 by 6·6 but lower than that for the previous ten years by 153·1 per 1,000, the death rate being lower in the former comparison by 6·25, and in the latter by 6·39 per 1,000.

The admissions and deaths, arranged according to the different sections of disease, are shown in Abstract XXXI.

General Diseases.—For *other eruptive fevers* there were 4 admissions, 2 being due to cow-pox and 2 to scarlet fever. *Influenza* caused 37 admissions, and there were 3 cases of *diphtheria*.

Enteric fever caused 9 admissions, and in each case the disease is said to have been contracted prior to embarkation.

For *other continued fevers* there were 27 admissions, or a ratio of 17·5 per 1,000, which is higher than the preceding year by 4·5. All were for simple continued fever. *Dysentery* caused 2 admissions, as compared with 13 in 1902. Sixteen admissions are recorded under *malarial fevers*, all being due to ague.

Under *septic diseases* there is 1 admission for erysipelas recorded, and *tubercular diseases* caused 2 admissions, both for tubercle of lung.

Venereal Diseases.—For *primary syphilis* there were 52 admissions, or a ratio of 33·7 per 1,000, which is higher than that for 1902 by 5·8. If to these be added 41 cases of soft chancre, the ratio for primary venereal sores equals 60·3, which is greater than the previous year's rate by 6·3. *Secondary syphilis*, with 57 admissions, gave a ratio of 36·9 per 1,000, which is higher than the previous year's rate by 16·6. *Gonorrhœa* caused 264 admissions, equal to a ratio of 171·0 per 1,000, which is lower than in 1902 by 6·7. Including all forms of venereal diseases, the total admissions equalled 268·2 per 1,000, as compared with 252·0 in 1902.

Parasitic Diseases caused 146 admissions, 130 being for scabies, 8 for ringworm, 6 for phthirius inguinalis, and 1 each for pediculus and favus. There was 1 admission for *alcoholism*. *Rheumatism* gave 21 admissions, including 4 for rheumatic fever, the ratio, 13·6 per 1,000, being lower than in the previous year's rate by 10·1.

Debility caused 16 admissions, or a ratio of 10·4 per 1,000, and *other general diseases* were represented by 9 cases of non-malignant new growth, and 1 each of cyst and mumps. *Troops on Board Ship.*

Local Diseases.—*Diseases of the Nervous System* caused 13 admissions, the equivalent ratio being 8·4 per 1,000, as compared with 11·9 in 1902. Of the cases, 8 are shown as neuralgia, 3 as epilepsy, and 2 as headache.

Diseases of the Eye, with 24 admissions, of which 16 were for conjunctivitis, gave a ratio of 15·6 per 1,000, which is higher than the previous year's rate by 1·3. There were 20 admissions for *diseases of other organs of special sense*, all being for aural affections, equal to a ratio of 13·0 per 1,000, which is higher than in the previous year by 3·1.

For *diseases of the circulatory system* there were 4 admissions, the ratio being 2·6 per 1,000, as compared with 6·8 in 1902. The cases were due to disordered action of heart.

Diseases of the Respiratory System caused 59 admissions, the admission ratio, 38·2 per 1,000, being below that for the previous year by 48·8. The cases comprised 43 for bronchial affections, 12 for pneumonia, and 1 each for laryngitis, spasmodic asthma, hæmoptysis, and pleurisy.

Diseases of the Digestive System caused 219 admissions, the ratio, 141·8 per 1,000, being lower than in the previous year by 16·4. Affections of the mouth and throat caused 135 admissions, and diarrhœa, dyspepsia, colic, and jaundice, contributed the greater number of the remaining cases.

Diseases of the Lymphatic System caused 8 admissions, the ratio, 5·2 per 1,000, being lower than in 1902 by 5·5. For *diseases of the urinary system* there were 3 admissions, 1 being due to acute nephritis, and 2 to Bright's disease, one of which proved fatal.

Diseases of the Generative System caused 86 admissions, equal to a ratio of 55·7 per 1,000, as compared with 45·5 in 1902. Soft chancre (already referred to under venereal diseases), and balanitis, were the chief causes of admission.

Diseases of the Organs of Locomotion caused 4 admissions, 3 being due to synovitis and 1 to myalgia. *Diseases of the Connective Tissue* caused 65 admissions, the ratio, 42·1 per 1,000, being higher by 9·8 than in 1902.

For *diseases of the skin* there were 136 admissions, including 39 for eczema, 32 for boil, and 29 for ulcer, the ratio being 88·1 per 1,000, as compared with 54·2 in the previous year.

Injuries.—There were 158 admissions, the ratio, 102·3 per 1,000, being higher than that in 1902 by 9·8.

For *general injuries* there were 3 admissions, 1 being due to burns and scalds, 1 to sun-stroke, and 1 to multiple injury.

There were 155 admissions for *local injuries*, mostly due to wounds, contusions and sprains.

Poisons.—Under this heading there were 2 admissions for poisoned wounds, and 1 death from acute alcoholic poisoning; the latter was a driver of the R.F.A., who died on the day the ship sailed from Southampton.

Officers.—The number of officers embarked was 1,262, among whom 26 cases of sickness occurred.

Women and Children.—1,847 women and 2,156 children embarked. There were 7 deaths among the children, 2 each from pneumonia, heat-apoplexy, and enteritis, and 1 from gastritis.

II.—Troops returning Home from Abroad.

The number of effective warrant officers, non-commissioned officers and men who embarked for England was 34,338, the equivalent annual strength being 2,074. The admissions into hospital numbered 1,728, and there were 7 deaths, equal to ratios of 833·2 and 3·38 per 1,000. The admission rate is higher than in 1902 by 150·3, and than the average rate for the preceding ten years by 24·9, but the death rate is lower in both comparisons by 2·63 and 5·10 respectively.

Troops on Board Ship.

The admissions and deaths, arranged according to the various sections of disease, are shown in Abstract XXXI.

GENERAL DISEASES.—*Eruptive Fevers* were represented by 4 cases of scarlet fever. *Influenza* caused 34 admissions. There were 42 admissions for, and 2 deaths from, *enteric fever.*

With three exceptions all the cases occurred among troops returning from South Africa, where the disease is reported to have been contracted; the 3 remaining cases came from India, and were probably contracted before embarkation.

Other Continued Fevers caused 31 admissions, of which 29 were simple continued fever, and 2 Mediterranean fever, the ratio, 14·9 per 1,000, being lower than in 1902 by 4·8.

Dysentery gave 39 admissions. The ratio, 18·8 per 1,000, is higher than that for 1902 by 12·0.

Malarial Fevers.—There were 172 admissions, 162 being for ague, and 10 for remittent fever, the ratio, 82·9 per 1,000, being higher than that for the previous year by 34·5.

Septic diseases were represented by 1 admission for erysipelas. Under *tubercular diseases* there were 2 admissions for tubercle of lung.

Venereal Diseases.—The admissions for *primary syphilis* were 71 in number, equal to a ratio of 34·2 per 1,000, which is higher than the previous year's rate by 11·2. Including soft chancre, for which there were 80 admissions, the total admission ratio for primary venereal sores was 72·8 per 1,000, or higher than in 1902 by 7·3. *Secondary syphilis*, with 91 admissions, gave a ratio of 43·9 per 1,000, which is higher than the previous year's rate by 27·3.

Gonorrhœa caused 232 admissions, or 111·9 per 1,000, which is lower than that for 1902 by 3·8. Taking all forms of venereal disease, the total admission ratio equalled 228·6 per 1,000, as compared with 197·8 in 1902.

There were 19 admissions for *parasitic diseases. Alcoholism* was the cause of 2 admissions. *Rheumatism* contributed 42 admissions (including 1 for rheumatic fever), the ratio, 20·3 per 1,000, being higher by 2·8 than in 1902. *Debility* was the cause of 23 admissions, equal to a ratio of 11·1 per 1,000, as compared with 12·2 in the previous year. There were 8 admissions under the head of *other general diseases*, 7 being due to non-malignant new growth, and 1 to anæmia.

LOCAL DISEASES.—For *diseases of the nervous system* 12 admissions are shown; of these, 5 were due to neuralgia, 3 to neuritis, 2 to melancholia, and 1 each to headache and delusional insanity.

Diseases of the Eye gave 14 admissions, the ratio per 1,000 being 6·8. The cases comprised 13 of conjunctivitis and 1 of keratitis.

There were 21 admissions for *diseases of other organs of special sense*, 20 of which were for aural affections.

For *diseases of the circulatory system* there were 4 admissions, 3 being due to phlebitis and 1 to disordered action of heart.

Under *diseases of the respiratory system* there were 149 admissions, equal to a ratio of 71·8 per 1,000, which is higher than the previous year's rate by 6·3. Of these 120 were for bronchial affections, 24 for pneumonia, 2 each for laryngitis and pleurisy, and 1 for hæmoptysis. There were 3 deaths from pneumonia.

Diseases of the Digestive System caused 215 admissions, or a ratio of 103·7 per 1,000, which is higher than the previous year's ratio by 2·7. Throat and mouth affections, diarrhœa, colic and indigestion were the chief causes of admission.

Diseases of the Lymphatic System caused 33 admissions, and those of the *urinary system* 5 admissions.

Diseases of the Generative System gave 119 admissions, with a ratio of 57·4 per 1,000, which is lower than the previous year's rate by ·2. Soft chancre, already referred to under the heading of venereal diseases, furnished 80 cases, and there were 14 admissions for orchitis, and 13 for ulcer of penis, 8 for balanitis, 2 for stricture of urethra, and 1 each for hydrocele and epididymitis.

Diseases of the Organs of Locomotion caused 15 admissions, of which 4 each were for periostitis and synovitis, 3 for necrosis, and 2 each for myalgia and

inflammation of bursa, and there were 58 admissions for *diseases of the connective tissue*, or a ratio of 28·0 per 1,000, which is higher than that for 1902 by 6·8. Abscess caused 34, and inflammation 24 of the admissions. *Troops on Board Ship.*

Diseases of the Skin, with 115 admissions, gave a ratio of 55·4 per 1,000, which is lower than that in 1902 by 5·9. The admissions were chiefly due to boils, ulcers, and eczema.

INJURIES.—151 admissions are recorded under this heading, equal to a ratio of 72·8, which is higher than that for the previous year by 30·1.

For *general injuries* there was 1 admission for heat-stroke; and for *local injuries*, 150 admissions, chiefly caused by wounds, contusions, and sprains. There was 1 death from fracture of spine.

POISONS.—Under poisons a death is recorded from ptomaine poisoning.

OFFICERS.—The number of officers embarked was 1,581, among whom there were 29 cases of sickness.

WOMEN AND CHILDREN.—Among 1,030 women embarked no casualties occurred. The number of children embarked was 1,810, among whom there were 4 deaths.

III.—TROOPS PROCEEDING FROM ONE STATION ABROAD TO ANOTHER.

The number of warrant officers, non-commissioned officers and men who embarked for passage between one station abroad and another was 14,697, the equivalent annual strength being 540, among whom there were 619 admissions into hospital, and 3 deaths, the ratio of admission being 1,146·2 and that of mortality 5·55 per 1,000. Both admission and mortality rates are lower by 23·5 and 2·09 respectively. In comparison with the average ratio for the preceding ten years, the admission ratio shows a decrease of 45·1, and the death rate one of ·78.

The admissions and deaths, arranged according to the different sections of disease, are shown in Abstract XXXI.

GENERAL DISEASES.—*Influenza* caused 1 admission. There were 7 admissions for *enteric fever*, 6 of the cases occurred among men leaving South Africa, the remaining case occurring in a man who embarked at Malta.

Other continued fevers caused 15 admissions, 13 for simple continued fevers, and 2 for Mediterranean fever, the ratio, 27·8 per 1,000, being above that for 1902 by 2·1.

Dysentery gave 5 admissions, equal to a ratio 9·3 per 1,000 as compared with 21·3 in 1902.

Malarial fevers, with 42 admissions, gave a ratio of 77·8 per 1,000, as compared with 90·9 in the previous year. Ague caused 1 death. There was 1 admission for *general tubercle*.

Venereal Diseases.—For *primary syphilis* there were 40 admissions, equal to a ratio of 74·1 per 1,000, which is higher than the previous year's rate by 25·4. If to this be added the sickness for soft chancre, for which there were 39 admissions, the total admission ratio for primary venereal sores equals 146·3 per 1,000, which is higher than the corresponding rate in 1902 by 37·7.

Secondary syphilis caused 34 admissions, or a ratio of 63·0 per 1,000, which is higher than that for the preceding year by 36·9. *Gonorrhœa*, with 139 admissions, gave a ratio of 257·4 per 1,000, as compared with 186·6 in the previous year.

Including all forms, the total admission ratio for venereal diseases was 466·7 per 1,000, which is above that for 1902 by 145·4.

There were 8 admissions for *parasitic diseases*, 4 being due to scabies, 3 to ringworm, and 1 to pediculis. *Alcoholism* caused 1 admission.

Rheumatism caused 13 admissions, equal to a ratio of 24·1 per 1,000, which is higher by 8·4 than the previous year's rate.

Debility caused 4 admissions, and under the heading of *other general diseases* 21 admissions are recorded, including 20 for non-malignant new growth, and 1 for cyst.

Troops on Board Ship.

LOCAL DISEASES.—*Diseases of the Nervous System.*—There was 1 admission under this head for melancholia.

Diseases of the eye caused 12 admissions, 10 for conjunctivitis, 1 for keratitis, and 1 for inflammation of lacrymal gland, and there were 12 cases of aural disease. There was 1 admission for varix under *diseases of the circulatory system. Respiratory affections* gave rise to 33 admissions, of which bronchial affections accounted for 27, and pneumonia for 6. The latter disease caused 2 deaths.

There were 57 admissions for *diseases of the digestive system*, including 26 for throat and mouth affections, and 12 for diarrhœa, the ratio, 105·6 per 1,000, being lower than that for 1902 by 53·2. *Diseases of the lymphatic system* caused 6 admissions, with a ratio of 11·1 per 1,000, which is lower than that for the previous year by 2·2. There was 1 admission under *diseases of the urinary system. Diseases of the generative system* caused 63 admissions, of which 39 were due to soft chancre, 12 to balinitis, and 9 to ulcer of penis, the ratio, 116·7 per 1,000, being higher than the previous year's rate by 33·5. *Diseases of the organs of locomotion* gave 4 admissions, 2 for synovitis, and 1 each for ostitis and periostitis. *Diseases of the connective tissue* gave 24 admissions, 14 being for abscess, 9 for inflammation, and 1 for œdema, equal to a ratio of 44·4 per 1,000, which is higher than in 1902 by 15·0. *Skin diseases* gave a ratio of 61·1 per 1,000; the admissions, 33 in number, were chiefly due to boils, ulcer, and corns.

INJURIES.—There were 41 admissions for local injuries, the ratio, 75·9 per 1,000, being above that for 1902 by 2·7, wounds, contusions, and sprains caused the majority of admissions.

OFFICERS.—Among 441 officers embarked, there were 10 cases of sickness.

WOMEN AND CHILDREN.—Among 237 women and 328 children embarked no casualties occurred.

IV.—INVALIDS RETURNING TO ENGLAND.

The number of invalids embarked for England from stations abroad, was 4,157, and amongst these there were 13 deaths during the voyage home. The sickness and mortality amongst these invalids are accounted for in the statistical tables of the commands from which they were invalided.

V.—SANITARY CONDITION OF SHIPS.

The sanitary condition of the different vessels and the accommodation provided for the troops on the various voyages were generally reported to be satisfactory.

ABSTRACT No. I.

ABSTRACT No. I.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS the TROOPS stationed in the UNITED KINGDOM during the Year 1903, with

Average Strength in Annual Returns, 110,565. Average Strength, including Men detached, 132,271. Diseases.	Admissions into Hospital.	Deaths.			Invalids Discharged the Service.
		With the Regiment.	Absent from the Regiment.	Total.	
GENERAL DISEASES.					
Small-pox	2	—	—	—	—
Other Eruptive Fevers	706	5	—	5	1
Influenza	1,571	2	—	2	1
Diphtheria	32	2	—	2	—
Enteric Fever	92	25	3	28	7
Other Continued Fevers	88	—	—	—	2
Cholera	—	—	—	—	—
Dysentery	94	1	—	1	7
Yellow Fever	—	—	—	—	—
Malarial Fevers	855	—	—	—	7
Septic Diseases	69	11	—	11	—
Tubercular Diseases	293	42	6	48	207
Syphilis, Primary	1,957	—	—	—	—
,, Secondary	3,158	5	—	5	117
Gonorrhœa	6,947	—	—	—	12
Hydrophobia	—	—	—	—	—
Parasitic Diseases	4,445	—	—	—	44
Scurvy	1	—	—	—	—
Alcoholism	166	4	—	4	—
Rheumatism	1,929	1	—	1	68
Debility	1,050	—	—	—	146
Other General Diseases	528	13	2	15	37
LOCAL DISEASES.					
Diseases of the—					
Nervous System { Nervous	671	32	3	35	163
Nervous System { Mental	182	1	—	1	125
Eye	1,304	—	—	—	185
Other Organs of Special Sense	943	2	—	2	159
Circulatory System	1,416	45	5	50	601
Respiratory ,,	3,764	78	10	88	77
Digestive ,,	9,087	36	8	44	404
Lymphatic ,,	706	—	—	—	9
Urinary ,,	305	17	1	18	61
Generative ,,	3,254	—	—	—	50
Organs of Locomotion	1,649	1	—	1	224
Connective Tissue	2,611	1	—	1	7
Skin	5,123	—	—	—	25
INJURIES.					
General	18	33	1	34	4
Local	9,450	46	5	51	132
In Action	8	—	—	—	6
POISONS	55	4	—	4	—
No appreciable disease	463	—	—	—	—
Details not available	—	—	—	—	—
Cause unknown (refers to deaths only)	—	—	—	—	—
General Total	64,892	407	44	451	2,888

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK, among the Ratios per 1,000 of the Strength, and the Average Ratios for 10 Years.

Average Number constantly Sick.	Ratio per 1,000.				Average Ratio per 1,000 from 1893 to 1902.			
	Admissions.	Deaths.*	Invalids finally discharged.*	Constantly Sick.	Admissions.	Deaths.*	Invalids finally discharged.*	Constantly Sick.
·13	—	—	—	—	—	—	—	·01
61·16	6·4	·04	·01	·55	10·4	·07	—	·36
59·97	14·2	·02	·01	·54	18·7	·04	·01	·66
2·36	·3	·02	—	·02	1·0	·02	—	·08
23·20	·8	·21	·05	·21	1·3	·26	·01	·21
4·60	·8	—	·02	·04	2·8	·02	—	·12
—	—	—	—	—	—	—	—	—
9·75	·8	·01	·05	·09	·8	·02	·08	·07
—	—	—	—	—	—	—	—	—
34·34	7·7	—	·05	·31	6·9	·02	·09	·28
4·60	·6	·08	—	·04	1·2	·06	·01	·09
45·00	2·7	·36	1·57	·41	3·4	·66	1·77	·48
205·02	17·7	—	—	1·86	33·8	—	—	3·34
289·94	28·6	·04	·88	3·53	26·9	·06	1·02	2·94
586·97	62·8	—	·09	5·13	66·9	—	·08	4·72
—	—	—	—	—	—	—	—	—
161·96	40·2	—	·33	1·47	23·9	—	·02	·80
·13	—	—	—	—	—	—	—	—
5·76	1·5	·03	—	·05	2·2	·06	·01	·09
137·22	17·4	·01	·51	1·24	30·1	·06	1·03	2·04
70·92	9·5	—	1·10	·64	10·2	·01	1·66	·74
35·60	4·8	·11	·29	·32	4·8	·11	·39	·34
44·41	6·1	·27	1·23	·40	8·0	·27	1·54	·55
23·69	1·7	·01	·95	·19	1·7	·02	1·11	·24
74·89	11·3	—	1·40	·68	12·2	—	1·31	·74
62·56	8·5	·02	1·20	·57	9·4	·01	1·37	·66
126·19	12·8	·38	4·54	1·14	13·8	·41	5·19	1·29
185·16	34·0	·66	·58	1·68	52·6	1·09	1·00	2·72
306·92	82·2	·23	3·05	3·32	106·0	·31	2·01	3·65
70·41	6·4	—	·07	·64	10·3	—	·14	1·06
27·00	2·8	·14	·46	·25	2·9	·12	·51	·25
227·61	29·4	—	·38	2·06	26·7	—	·46	1·79
97·35	14·0	·01	1·69	·88	12·8	·01	1·94	·86
103·70	23·6	·01	·05	·94	25·9	·01	·10	1·12
223·64	46·3	—	·19	2·11	50·2	—	·29	2·25
2·08	·2	·26	·03	·02	·7	·33	·04	·04
412·26	88·5	·39	1·00	3·73	98·9	·35	1·31	4·27
·90	·1	—	·05	·01	·8	—	·52	·06
2·12	·5	·03	—	·02	·2	·05	·01	·01
15·38	4·2	—	—	·14	3·8	—	—	·13
—	—	—	—	—	—	—	—	·03
—	—	—	—	—	—	·02	—	—
3886·29	866·9	3·41	21·83	35·23	682·2	4·47	25·03	39·59

* These ratios are calculated on the strength including men detached.

ABSTRACT A.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS into TROOPS stationed in ENGLAND and WALES during the Year 1903, with

Average Strength in Annual Returns, 83,505. Average Strength, including Men detached, 100,246. Diseases.	Admissions into Hospital.	Deaths. With the regiment.	Deaths. Absent from the regiment.	Deaths. Total.	Invalids Discharged the Service.	Average Number constantly Sick.
GENERAL DISEASES.						
Small-pox	1	—	—	—	—	·01
Other Eruptive Fevers	547	2	—	2	—	46·77
Influenza	1,313	1	—	1	1	50·28
Diphtheria	31	2	—	2	—	2·35
Enteric Fever	66	18	2	20	7	18·50
Other continued Fevers	64	—	—	—	1	3·09
Cholera	—	—	—	—	—	—
Dysentery	71	1	—	1	3	6·96
Yellow Fever	—	—	—	—	—	—
Malarial Fevers	664	—	—	—	6	26·46
Septic Diseases	52	9	—	9	—	3·18
Tubercular Diseases	219	28	5	33	150	33·20
Syphilis, Primary	1,499	—	—	—	—	160·76
,, Secondary	2,433	3	—	3	96	315·75
Gonorrhœa	5,138	—	—	—	9	445·00
Hydrophobia	—	—	—	—	—	—
Parasitic Diseases	3,079	—	—	—	38	111·52
Scurvy	1	—	—	—	—	·13
Alcoholism	121	2	—	2	—	4·22
Rheumatism	1,449	1	—	1	47	102·18
Debility	773	—	—	—	113	54·69
Other General Diseases	361	10	2	12	26	24·79
LOCAL DISEASES.						
Diseases of the—						
Nervous System (Nervous)	491	23	3	26	121	31·35
Nervous System (Mental)	137	1	—	1	89	15·20
Eye	941	—	—	—	129	52·26
Other Organs of Special Sense	755	2	—	2	141	51·55
Circulatory System	1,029	31	2	33	457	93·84
Respiratory ,,	2,768	58	8	66	59	134·33
Digestive ,,	6,990	29	5	34	313	283·44
Lymphatic ,,	494	—	—	—	8	48·22
Urinary ,,	222	14	1	15	46	19·44
Generative ,,	2,310	—	—	—	39	169·64
Organs of Locomotion	1,193	1	—	1	177	73·11
Connective Tissue	1,882	—	—	—	6	75·00
Skin	3,729	—	—	—	21	168·48
INJURIES.						
General	14	29	1	30	1	1·22
Local	6,889	33	4	37	108	297·07
In Action	6	—	—	—	4	·84
POISONS	49	2	—	2	—	2·01
No appreciable disease	353	—	—	—	—	12·41
Details not available	—	—	—	—	—	—
Cause unknown (refers to deaths only)	—	—	—	—	—	—
General Total	48,134	300	33	333	2,216	2,939·26

HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK, among the the Ratios per 1,000 of the Strength, and the Average Ratios for 10 years.

Ratio per 1,000.				Average Ratio per 1,000 from 1893 to 1902.			
Admissions.	Deaths.*	Invalids finally Discharged.*	Constantly Sick.	Admissions.	Deaths.*	Invalids finally Discharged.*	Constantly Sick.
—	—	—	—	—	·01	—	·01
6·6	·02	—	·56	12·1	·07	—	1·02
15·7	·01	·01	·60	21·0	·03	—	·74
·4	·02	—	·03	1·2	·02	—	·09
·8	·20	·07	·22	1·2	·24	·01	·19
·8	—	·01	·04	2·8	·02	—	·11
—	—	—	—	—	—	—	—
·8	·01	·03	·08	·9	·02	·09	·08
—	—	—	—	—	—	—	—
8·0	—	·06	·32	7·6	·02	·10	·30
·6	·09	—	·04	1·3	·07	·01	·09
2·6	·32	1·49	·40	3·4	·63	1·75	·48
17·9	—	—	1·92	35·3	—	—	3·59
29·1	·03	·96	3·78	28·8	·06	1·11	3·26
61·5	—	·09	5·33	68·2	—	·09	4·86
—	—	—	—	—	—	—	—
36·9	—	·37	1·34	23·6	—	·02	·80
—	—	—	—	—	—	—	—
1·4	·02	—	·05	2·2	·06	—	09
17·4	·01	·47	1 22	31·1	·07	1·06	2·15
9·3	—	1·13	·65	10·5	·01	1·81	80
4·3	·12	27	30	5·1	11	41	·35
5·9	·26	1·21	·38	8·0	·28	1·58	·57
1·6	·01	·89	·18	1·6	·03	1·06	·22
11·3	—	1·28	·63	12·0	—	1·43	·74
9·0	·02	1·40	·62	9·8	·02	1·44	·69
12·3	·33	4·56	1·12	13·9	·42	5·42	1·32
33·1	·66	·59	1·61	52·7	1·13	1·04	2·73
83·7	·34	3·12	3·39	110·4	·31	2·15	3·81
5·9	—	·08	·58	10·8	—	·14	1·14
2·7	·15	·46	·23	2·9	·12	·49	·25
27·7	—	·39	2·03	27·2	·01	·49	1·88
14·3	·01	1·76	·88	12·7	·01	2·03	·86
22·5	—	·06	·90	25·8	·01	·10	1·12
44·7	—	·21	2·02	48·3	—	·29	2·17
·2	·30	·01	·01	·8	·31	·04	·04
82·5	37	1·06	3·56	95·6	·35	1·34	4·18
·1	—	·04	·01	·8	—	·52	·06
·6	·02	—	02	·3	·06	·01	·01
4·2	—	—	·15	4·2	—	—	·14
—	—	—	—	—	—	—	·04
—	—	—	—	—	·01	—	—
576·4	3·32	22·10	35·20	691·1	4·51	26·03	40·98

* *These ratios* are calculated on the strength including men detached.

ABSTRACT B.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS among the TROOPS stationed in SCOTLAND during the Year 1903, with

Average Strength in Annual Returns, 5,151. Average Strength, including men detached, 6,646. Diseases.	Admissions into Hospital.	Deaths. With the regiment.	Deaths. Absent from the regiment.	Deaths. Total.	Invalids Discharged the Service.	Average Number constantly Sick.
GENERAL DISEASES.						
Small-pox	—	—	—	—	—	—
Other Eruptive Fevers	16	—	—	—	—	·79
Influenza	42	—	—	—	—	1·28
Diphtheria	—	—	—	—	—	—
Enteric Fever	2	1	—	1	—	·16
Other Continued Fevers	6	—	—	—	—	·18
Cholera	—	—	—	—	—	—
Dysentery	4	—	—	—	2	·58
Yellow Fever	—	—	—	—	—	—
Malarial Fevers	14	—	—	—	—	·59
Septic Diseases	6	1	—	1	—	·22
Tubercular Diseases	12	6	—	6	13	2·08
Syphilis, Primary	86	—	—	—	—	7·28
,, Secondary	140	1	—	1	3	12·75
Gonorrhœa	395	—	—	—	3	21·55
Hydrophobia	—	—	—	—	—	—
Parasitic Diseases	186	—	—	—	3	5·45
Scurvy	—	—	—	—	—	—
Alcoholism	5	2	—	2	—	·14
Rheumatism	102	—	—	—	7	6·21
Debility	42	—	—	—	2	2·31
Other General Diseases	21	1	—	1	1	·75
LOCAL DISEASES.						
Diseases of the—						
Nervous System (Nervous)	32	4	—	4	10	2·92
Nervous System (Mental)	6	—	—	—	11	1·51
Eye	62	—	—	—	10	3·44
Other Organs of Special Sense	36	—	—	—	9	2·21
Circulatory System	83	4	—	4	34	6·23
Respiratory ,,	164	5	—	5	2	8·31
Digestive ,,	318	—	—	—	19	12·23
Lymphatic ,,	29	—	—	—	—	2·62
Urinary ,,	17	2	—	2	2	1·01
Generative ,,	198	—	—	—	2	12·30
Organs of Locomotion	72	—	—	—	8	4·16
Connective Tissue	107	—	—	—	1	4·81
Skin	228	—	—	—	—	8·14
INJURIES.						
General	—	1	—	1	—	—
Local	429	5	1	6	6	16·64
In Action	—	—	—	—	1	—
POISONS	3	—	—	—	—	·03
No appreciable disease	21	—	—	—	—	·75
Cause unknown (refers to deaths only)	—	—	—	—	—	—
General Total	2,884	33	1	34	149	149·63

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK, the Ratios per 1,000 of the Strength, and the Average Ratios for 10 years.

Ratio per 1,000.				Average Ratio per 1,000 from 1893 to 1902.			
Admissions.	Deaths.*	Invalids finally Discharged.*	Constantly Sick.	Admissions.	Deaths.*	Invalids finally Discharged.*	Constantly Sick.
—	—	—	—	·1	—	—	·01
3·1	—	—	·15	6·3	·04	—	·32
8·1	—	—	·25	9·6	·07	—	·26
—	—	—	—	·1	—	—	·01
·4	·15	—	·03	·8	·13	—	·12
1·2	—	—	·03	2·6	·02	—	·07
—	—	—	—	—	—	—	—
·8	—	·30	·11	·3	—	·11	·04
—	—	—	—	—	—	—	—
2·7	—	—	·11	3·4	—	·02	·11
1·2	·15	—	·04	1·3	·11	—	·06
2·3	·90	1·96	·40	3·5	·92	1·52	·46
16·7	—	—	1·41	20·7	—	—	1·64
27·2	·15	·45	2·48	17·1	·11	·54	1·32
76·7	—	·45	4·18	57·7	—	·02	3·26
—	—	—	—	—	—	—	—
36·1	—	·45	1·06	22·1	—	—	·49
—	—	—	—	·1	—	·02	—
1·0	·30	—	·03	2·2	·13	—	·06
19·8	—	1·06	1·21	22·1	·04	·69	1·29
8·1	—	·30	·45	6·6	—	·67	·29
4·1	·15	·15	·15	3·2	·09	·32	·28
6·2	·60	1·51	·57	7·6	·37	1·31	·55
1·2	—	1·66	·29	1·8	—	·79	·23
12·0	—	1·51	·67	9·3	—	·73	·45
7·0	—	1·35	·43	5·1	—	·62	·29
16·1	·60	5·12	1·21	10·1	·47	2·59	·73
31·8	·75	·30	1·61	44·9	1·20	1·12	2·04
61·7	—	2·86	2·37	76·4	·32	1·22	2·21
5·6	—	—	·51	6·0	·04	·11	·40
3·3	·30	·30	·20	2·4	·13	·43	·20
38·4	—	·30	2·39	22·6	—	·36	1·13
14·6	—	1·20	·81	10·6	·04	1·18	·59
20·8	—	·15	·93	23·5	—	—	·88
44·3	—	—	1·58	49·4	—	·17	1·66
—	15	—	—	·5	·64	·04	·04
83·3	·60	·60	3·23	86·1	·52	1·20	3·24
—		·15	—	·2	—	·43	·02
·6	—	—	·01	·1	·04	—	·01
4·1	—	—	·15	2·5	—	—	06
—	—	—	—	—	·04	—	—
540·9	5·12	22·42	29·05	537·9	5·47	16·21	25·25

* These ratios are calculated on the strength including men detached.

ABSTRACT C.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS among the TROOPS stationed in IRELAND during the Year 1903, with

Average Strength in Annual Returns, 21,909. Average Strength, including Men detached, 25,379. — Diseases.	Admissions into Hospital.	Deaths.			Invalids Discharged the Service.	Average Number constantly Sick.
		With the regiment.	Absent from the regiment.	Total.		
GENERAL DISEASES.						
Small-pox	1	—	—	—	—	·12
Other Eruptive Fevers	143	3	—	3	1	13·60
Influenza	216	1	—	1	—	8·41
Diphtheria	1	—	—	—	—	·01
Enteric Fever	24	6	1	7	—	4·54
Other Continued Fevers	18	—	—	—	1	1·33
Cholera	—	—	—	—	—	—
Dysentery	19	—	—	—	2	2·21
Yellow Fever	—	—	—	—	—	—
Malarial Fevers	177	—	—	—	1	7·29
Septic Diseases	11	1	—	1	—	1·20
Tubercular Diseases	62	8	1	9	44	9·72
Syphilis, Primary	372	—	—	—	—	36·98
,, Secondary	585	1	—	1	18	61·43
Gonorrhœa	1,414	—	—	—	—	100·42
Hydrophobia	—	—	—	—	—	—
Parasitic Diseases	1,180	—	—	—	3	44·99
Scurvy	—	—	—	—	—	—
Alcoholism	40	—	—	—	—	1·40
Rheumatism	378	—	—	—	14	28·83
Debility	235	—	—	—	31	13·92
Other General Diseases	146	2	—	2	10	10·06
LOCAL DISEASES.						
Diseases of the—						
Nervous System { Nervous	148	5	—	5	32	10·14
Nervous System { Mental	39	—	—	—	25	6·98
Eye	301	—	—	—	46	18·89
Other Organs of Special Sense	152	—	—	—	9	8·80
Circulatory System	304	10	3	13	110	26·12
Respiratory ,,	832	15	2	17	16	42·52
Digestive ,,	1,779	7	3	10	72	71·25
Lymphatic ,,	183	—	—	—	1	19·57
Urinary ,,	66	1	—	1	13	6·55
Generative ,,	746	—	—	—	9	45·67
Organs of Locomotion	284	—	—	—	39	20·08
Connective Tissue	622	1	—	1	—	23·89
Skin	1,166	—	—	—	4	57·02
INJURIES.						
General	4	3	—	3	3	·86
Local	2,132	8	—	8	18	99·15
In action	2	—	—	—	1	·06
POISONS	3	2	—	2	—	·08
No appreciable disease	89	—	—	—	—	2·22
Cause unknown (refers to deaths only)	—	—	—	—	—	—
General Total	13,874	74	10	84	523	806·31

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK the Ratios per 1,000 of the Strength, and the Average ratios for 10 Years.

Ratio per 1,000.				Average Ratio per 1,000 from 1893 to 1903.			
Admissions.	Deaths.*	Invalids finally Discharged.*	Constantly Sick.	Admissions.	Deaths.*	Invalids finally Discharged.*	Constantly Sick.
—	—	—	·01	—	—	—	·00
6·5	·12	·04	·62	5·5	·06	—	·42
9·9	·04	—	·38	13·1	·06	·01	·47
—	—	—	—	·5	·03	—	·04
1·1	·28	—	·21	1·8	·32	—	·29
·8	—	·04	·06	3·0	·02	—	·13
—	—	—	—	—	—	—	—
·9	—	·08	·10	·6	·01	·05	·04
—	—	—	—	—	—	—	—
8·1	—	·04	·33	5·5	·01	·07	·22
·5	·04	—	·06	1·0	·03	·01	·08
2·8	·35	1·73	·44	3·5	·71	1·89	·51
17·0	—	—	1·69	31·0	—	—	2·85
26·7	·04	·71	2·80	22·1	·05	·82	2·19
64·5	—	—	4·58	64·5	—	·06	4·46
—	—	—	—	—	—	—	—
53·9	—	·12	2·05	25·4	—	·03	·87
—	—	—	—	—	—	—	—
1·8	—	—	·07	2·1	·06	·02	·08
17·3	—	·55	1·32	28·3	·06	1·02	1·84
10·7	—	1·22	·64	9·9	·01	1·33	·64
6·7	·08	·40	·46	4·2	·11	·32	·29
6·8	·20	1·26	·46	8·0	·20	1·45	·51
1·8	—	·99	·32	1·9	·02	1·31	·33
13·7	—	1·81	·86	13·5	—	1·06	·83
6·9	—	·35	·40	8·7	·01	1·30	·61
13·9	·51	4·33	1·19	14·2	·37	4·91	1·31
38·0	·67	·63	1·94	53·8	·90	·83	2·81
81·2	·39	2·84	3·25	97·0	·28	1·71	3·38
8·4	—	·04	·89	9·5	·01	·16	·95
3·0	·04	·51	·30	2·9	·10	·58	·27
34·0	—	·35	2·09	25·5	—	·41	1·64
13·0	—	1·54	·92	13·2	·01	1·80	·89
28·4	·04	—	1·09	27·0	·01	·11	1·17
53·2	—	·16	2·60	56·3	—	·29	2·58
·2	·12	·12	·04	·4	·36	·03	·02
97·3	·31	·71	4·53	112·1	·33	1·25	4·77
·1	—	·04	—	·9	—	·56	·07
·1	·08	—	—	·1	·02	—	·01
4·1	—	—	·10	2·7	—	—	·09
—	—	—	—	—	·02	—	—
633·3	3·31	20·61	36·80	669·7	4·16	23·39	37·66

* *These ratios* are calculated on the strength including men detached.

ABSTRACT D.—TABLE showing the AVERAGE STRENGTH, SICKNESS, UNITED KINGDOM during the year 1903,

Average Strength.	Officers, 4,545.			
Diseases.	Attacks of Illness.	Deaths.	Ratio per 1,000. Attacks.	Ratio per 1,000. Deaths.
GENERAL DISEASES.				
Small-pox	—	—	—	—
Other Eruptive Fevers	17	1	3·7	·22
Influenza	236	—	51·9	—
Diphtheria	1	—	·2	—
Enteric Fever	5	—	1·1	—
Other Continued Fevers	8	—	1·8	—
Cholera	—	—	—	—
Dysentery	9	—	2·0	—
Malarial Fevers	35	1	7·7	·22
Septic Diseases	3	—	·7	—
Tubercular Diseases	4	—	·9	—
Syphilis, Primary	—	—	—	—
„ Secondary	—	—	—	—
Gonorrhœa	12	—	2·6	—
Hydrophobia	—	—	—	—
Parasitic Diseases	9	1	2·0	·22
Scurvy	—	—	—	—
Alcoholism	1	—	·2	—
Rheumatism	43	—	9·5	—
Debility	17	—	3·7	—
Other General Diseases	21	1	4·6	·22
LOCAL DISEASES.				
Diseases of the—				
Nervous System { Nervous	36	—	7·9	—
Nervous System { Mental	1	—	·2	—
Eye	17	—	3·7	—
Other Organs of Special Sense	3	—	·7	—
Circulatory System	19	4	4·2	·88
Respiratory „	138	2	30·4	·44
Digestive „	207	2	45·6	·44
Lymphatic „	14	—	3·1	—
Urinary „	15	—	3·3	—
Generative „	34	—	7·5	—
Organs of Locomotion	67	—	14·7	—
Connective Tissue	44	—	9·7	—
Skin	35	—	7·7	—
INJURIES.				
General	2	1	·4	·22
Local	346	3	76·1	·66
In Action	—	—	—	—
POISONS	—	1	—	·22
Not yet diagnosed	—	—	·4	—
No appreciable disease	2	—	—	—
General Total	1,401	17	308·3	3·74

and MORTALITY among the OFFICERS, WOMEN, and CHILDREN in the with the Ratios per 1,000 of the Strength.

Women, 12,433.				Children, 23,277.			
Attacks of Illness.	Deaths.	Ratio per 1,000.		Attacks of Illness.	Deaths.	Ratio per 1,000.	
		Attacks.	Deaths.			Attacks.	Deaths.
1	—	·1	—	1	—	—	—
16	—	1·3	—	1,588	18	68·2	·77
337	—	27·1	—	262	3	11·3	·13
8	—	·6	—	77	7	3·3	·30
7	—	·6	—	13	2	·6	·09
3	—	·2	—	38	—	1·6	—
—	—	—	—	—	—	—	—
5	—	·4	—	6	1	·3	·04
69	1	5·6	·08	50	—	2·2	—
16	3	1·3	·24	9	—	·4	—
65	5	5·2	·40	55	12	2·4	·52
—	—	—	—	—	—	—	—
9	—	·7	—	8	—	·3	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
6	—	·5	—	218	—	9·4	—
—	—	—	—	—	—	—	—
6	—	·5	—	—	—	—	—
225	2	18·1	·16	64	—	2·8	—
1,164	—	93·6	—	841	37	36·1	1·59
199	5	16·0	·40	825	12	35·4	·52
301	7	24·2	·56	205	37	8·8	1·59
7	1	·6	·08	1	—	—	—
64	—	5·1	—	215	—	9·2	—
28	—	2·3	—	166	1	7·1	·04
143	9	11·5	·72	23	6	1·0	·26
786	7	63·2	·56	3,519	102	151·2	4·38
1,033	2	83·0	·16	2,371	48	101·9	2·06
30	1	2·4	·08	90	—	3·9	—
51	2	4·1	·16	15	1	·6	·04
534	2	43·0	·16	60	—	2·6	—
56	—	4·5	—	45	—	1·9	—
122	—	9·8	—	192	1	8·3	·04
148	—	11·9	—	559	5	24·0	·21
2	1	·2	08	8	5	·3	·21
113	—	9·1	—	582	4	25·0	·17
—	—	—	—	—	—	—	—
2	—	·3	—	2	—	·1	[illegible]
—	—	—	—	—	—	—	—
—	—	—	—	3	—	·1	—
5,565	48	446·8	3·86	12,111	302	520·3	12·97

ABSTRACT E.—TABLE showing the AVERAGE ANNUAL STRENGTH, ADMISSIONS into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK amongst the TROOPS taking part in the MANŒUVRES on SALISBURY PLAIN from 10th September to 19th September, 1903, with Ratios per 1,000 of the Strength.

Average Annual Strength, 838.					Ratio per 1,000.			
Diseases.	Admissions into Hospital.	Deaths.	Invalids.	Constantly Sick.	Admissions.	Deaths.	Invalids.	Constantly Sick.
GENERAL DISEASES.								
Small-pox	—	—	—	—	—	—	—	—
Other Eruptive Fevers	—	—	—	—	—	—	—	—
Influenza	6	—	—	·33	7·2	—	—	·39
Diphtheria	—	—	—	—	—	—	—	—
Enteric Fever	1	—	—	·31	1·2	—	—	·37
Other Continued Fevers	—	—	—	—	—	—	—	—
Cholera	—	—	—	—	—	—	—	—
Dysentery	1	—	—	·06	1·2	—	—	·07
Yellow Fever	—	—	—	—	—	—	—	—
Malarial Fevers	20	—	—	·55	23·9	—	—	·66
Septic Diseases	—	—	—	—	—	—	—	—
Tubercular diseases	—	—	—	—	—	—	—	—
Syphilis, Primary	5	—	—	·80	6·0	—	—	·95
,, Secondary	5	—	—	·74	6·0	—	—	·88
Gonorrhœa	8	—	—	1·65	9·5	—	—	1·97
Hydrophobia	—	—	—	—	—	—	—	—
Parasitic Diseases	10	—	—	·31	11·9	—	—	·37
Scurvy	—	—	—	—	—	—	—	—
Alcoholism	—	—	—	—	—	—	—	—
Rheumatism	34	—	1	1·43	40·6	—	1·19	1·71
Debility	2	—	1	·14	2·4	—	1·19	·17
Other General Diseases	—	—	—	—	—	—	—	—
LOCAL DISEASES.								
Diseases of the—								
Nervous System { Nervous	5	—	1	·23	6·0	—	1·19	·27
Nervous System { Mental	2	—	2	·18	2·4	—	2·39	·22
Eye	8	—	—	·43	9·5	—	—	·51
Other Organs of Special Sense	4	—	—	·09	4·8	—	—	·11
Circulatory System	7	—	2	·44	8·4	—	2·39	·53
Respiratory ,,	22	—	—	1·31	26·2	—	—	1·56
Digestive ,,	57	—	1	2·13	68·0	—	1·19	2·54
Lymphatic ,,	5	—	—	·34	6·0	—	—	·41
Urinary ,,	1	—	1	·10	1·2	—	1·19	·12
Generative ,,	15	—	—	1·92	17·9	—	—	2·29
Organs of Locomotion	24	—	1	1·19	28·6	—	1·19	1·42
Connective Tissue	22	—	—	1·20	26·2	—	—	1·43
Skin	41	—	—	1·25	48·9	—	—	1·49
INJURIES.								
General	—	—	—	—	—	—	—	—
Local	367	—	1	6·21	437·9	—	1·19	7·41
In Action	—	—	—	—	—	—	—	—
POISONS	—	—	—	—	—	—	—	—
No appreciable disease	—	—	—	—	—	—	—	—
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—	—
General Total	672	—	11	23·34	801·9	—	13·12	27·85

* The figures in this table are included in Abstracts No. I and A, United Kingdom and England.

* ABSTRACT F.—TABLE showing the AVERAGE ANNUAL STRENGTH, ADMISSIONS into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK amongst the TROOPS taking part in the MANŒUVRES in IRELAND from 1st September to 10th September, 1903, with Ratios per 1,000 of the Strength.

Annual Average Strength, 66.					Ratio per 1,000.			
Diseases.	Admission into Hospital.	Deaths.	Invalids.	Constantly Sick.	Admissions.	Deaths.	Invalids.	Constantly Sick.
GENERAL DISEASES.								
Small Pox	—	—	—	—	—	—	—	—
Other Eruptive Fevers	—	—	—	—	—	—	—	—
Influenza	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—
Enteric Fever	—	—	—	—	—	—	—	—
Other Continued Fevers	—	—	—	—	—	—	—	—
Cholera	—	—	—	—	—	—	—	—
Dysentery	—	—	—	—	—	—	—	—
Yellow Fever	—	—	—	—	—	—	—	—
Malarial Fevers	1	—	—	·01	15·1	—	—	·15
Septic Diseases	—	—	—	—	—	—	—	—
Tubercular Diseases	—	—	—	—	—	—	—	—
Syphilis, Primary	—	—	—	—	—	—	—	—
,, Secondary	—	—	—	—	—	—	—	—
Gonorrhœa	4	—	—	·25	60·6	—	—	3·79
Hydrophobia	—	—	—	—	—	—	—	—
Parasitic Diseases	—	—	—	—	—	—	—	—
Scurvy	—	—	—	—	—	—	—	—
Alcoholism	—	—	—	—	—	—	—	—
Rheumatism	—	—	—	—	—	—	—	—
Debility	1	—	—	·07	15·1	—	—	1·06
Other General Diseases	—	—	—	—	—	—	—	—
LOCAL DISEASES.								
Diseases of the—								
Nervous System { Nervous	—	—	—	—	—	—	—	—
Nervous System { Mental	—	—	—	—	—	—	—	—
Eye	1	—	—	·04	15·1	—	—	·60
Other Organs of Special Sense	—	—	—	—	—	—	—	—
Circulatory System	—	—	—	—	—	—	—	—
Respiratory ,,	2	1	—	·02	30·3	15·15	—	·30
Digestive ,,	3	—	—	·13	45·5	—	—	1·97
Lymphatic ,,	—	—	—	—	—	—	—	—
Urinary ,,	—	—	—	—	—	—	—	—
Generative ,,	—	—	—	—	—	—	—	—
Organs of Locomotion	—	—	—	—	—	—	—	—
Connective Tissue	1	—	—	·06	15·1	—	—	·91
Skin	—	—	—	—	—	—	—	—
INJURIES.								
General	—	—	—	—	—	—	—	—
Local	4	—	—	·57	60·6	—	—	8·64
In Action	—	—	—	—	—	—	—	—
POISONS	—	—	—	—	—	—	—	—
No appreciable disease	—	—	—	—	—	—	—	—
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—	—
General Total	17	1	—	1·15	257·6	15·15	—	17·42

* The figures in this table are included in Abstracts No. I and C, United Kingdom and Ireland.

ABSTRACT No. II.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS the TROOPS stationed at GIBRALTAR during the year 1903, with the Ratios

Average Strength, 4,689. Diseases.	Admissions into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number sent Home.	Invalids. Number finally Discharged the Service.	Average number constantly sick.
GENERAL DISEASES.							
Small-pox	—	—	—	—	—	—	—
Other Eruptive Fevers	—	—	—	—	—	—	—
Influenza	5	—	—	—	—	—	·25
Diphtheria	—	—	—	—	—	—	—
Enteric Fever	11	2	—	2	—	—	1·79
Other Continued Fevers	36	—	—	—	12	—	3·81
Cholera	—	—	—	—	—	—	—
Dysentery	7	—	—	—	2	—	·60
Yellow Fever	—	—	—	—	—	—	—
Malarial Fevers	25	1	—	1	2	—	1·03
Septic Diseases	—	—	—	—	—	—	—
Tubercular Diseases	14	2	2	4	6	6	2·01
Syphilis, Primary	64	—	—	—	—	—	9·69
,, Secondary	47	1	—	1	6	4	8·17
Gonorrhœa	305	—	—	—	—	—	22·81
Hydrophobia	—	—	—	—	—	—	—
Parasitic diseases	44	—	—	—	—	—	1·08
Scurvy	—	—	—	—	—	—	—
Alcoholism	21	—	—	—	—	—	1·26
Rheumatism	58	1	—	1	6	—	7·32
Debility	32	—	—	—	3	2	2·98
Other General Diseases	11	1	1	2	1	—	·90
LOCAL DISEASES.							
Diseases of the—							
Nervous System { Nervous	29	—	—	—	7	5	1·38
Nervous System { Mental	8	—	—	—	4	9	2·10
Eye	28	—	—	—	6	2	·56
Other Organs of Special Sense	18	—	—	—	1	—	·79
Circulatory System	42	1	2	3	18	8	4·55
Respiratory ,,	97	—	1	1	2	—	5·28
Digestive ,,	208	—	—	—	4	—	7·11
Lymphatic ,,	37	—	—	—	3	—	5·69
Urinary ,,	11	—	—	—	3	—	1·06
Generative ,,	249	—	—	—	1	2	21·75
Organs of Locomotion	29	—	—	—	5	2	2·84
Connective Tissue	65	—	—	—	—	—	3·52
Skin	89	—	—	—	—	—	3·48
INJURIES.							
General	—	1	—	1	—	—	—
Local	248	3	—	3	5	4	15·19
In Action	—	—	—	—	—	—	
POISONS	1	—	—	—	—	—	·01
No appreciable disease	22	—	—	—	—	—	1·04
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	1,861	13	6	19	97	44	140·05

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK among per 1,000 of the Strength, and the Average Ratios for 10 years.

Ratio per 1,000.					Average Ratio per 1,000 from 1893 to 1902.				
Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly sick.	Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
—	—	—	—	—	·1	—	—	—	·01
—	—	—	—	—	1·3	—	—	—	·16
1·1	—	—	—	·05	5·1	—	—	—	·15
—	—	—	—	—	·1	—	—	—	·02
2·3	·43	—	—	·38	3·4	·95	·17	—	·55
7·7	—	2·56	—	·81	14·0	·06	·55	·11	1·34
—	—	—	—	—	—	—	—	—	—
1·5	—	43	—	·13	·5	·02	—	—	·03
—	—	—	—	—	—	—	—	—	—
5·3	·21	·43	—	·22	9·5	—	·06	·04	·33
—	—	—	—	—	·5	·04	—	—	·03
3·0	·85	1·28	1·28	·43	2·3	·64	1·63	1·27	·40
13·6	—	—	—	2·07	11·2	—	—	·02	1·45
10·0	·21	1·28	·85	1·74	19·7	·04	·93	·40	2·51
65·0	—	—	—	4·86	119·4	—	·17	·04	10·28
—	—	—	—	—	—	·02	—	—	—
9·4	—	—	—	·23	11·7	—	—	—	·41
—	—	—	—	—	—	—	—	—	—
4·5	—	—	—	·27	6·5	·11	·04	—	·27
12·4	·21	1·28	—	1·56	21·7	·02	·89	·19	1·48
6·8	—	·64	·43	·64	4·9	—	1·33	·17	·43
2·3	·43	·21	—	·19	6·6	·04	·30	·15	·51
6·2	—	1·49	1·07	·29	8·2	·17	1·19	·91	·56
1·7	—	·85	1·92	·45	1·5	·06	1·46	1·54	·36
6·0	—	1·28	·43	·12	8·4	—	1·00	·74	·65
3·8	—	·21	—	·17	8·2	—	·44	·47	·55
9·0	·64	3·84	1·71	·97	6·5	·44	1·95	1·48	·72
20·7	·21	·43	—	1·13	24·6	·30	·78	·38	1·61
44·4	—	·85	—	1·52	86·7	·19	·97	·51	2·65
7·9	—	·64	—	1·21	16·1	—	·44	·21	2·15
2·3	—	·64	—	·23	2·9	·15	·34	·23	·29
53·1	—	·21	·43	4·64	95·0	·02	·19	·11	9·21
6·2	—	1·07	·43	·61	7·6	·04	·64	·47	·57
13·9	—	—	—	·75	23·9	—	·13	·08	1·15
19·0	—	—	—	·74	37·8	—	·11	·04	1·98
—	·21	—	—	—	·4	·21	·06	·06	·03
82·9	·64	1·07	·85	3·24	89·2	·55	·59	·47	4·13
—	—	—	—	—	—	—	—	—	—
·2	—	—	—	—	—	·02	—	—	—
4·7	—	—	—	·22	4·8	—	—	—	·16
—	—	—	—	—	—	—	—	—	—
396·9	4·06	20·69	9·38	23·87	660·3	4·11	16·36	10·09	47·13

ABSTRACT No. III.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS the TROOPS stationed at MALTA during the Year 1903, with the Ratios

Average Strength, 9,313. Diseases.	Admissions into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number sent Home.	Invalids. Number finally Discharged the Service.	Average Number constantly Sick.
GENERAL DISEASES.							
Small-pox	—	—	—	—	—	—	—
Other Eruptive Fevers	9	—	—	—	—	—	1·08
Influenza	49	—	—	—	—	—	1·75
Diphtheria	1	—	—	—	—	—	·07
Enteric Fever	20	7	1	8	4	—	4·16
Other Continued Fevers	1,190	9	—	9	134	7	108·36
Cholera	—	—	—	—	—	—	—
Dysentery	15	1	—	1	2	1	1·59
Yellow Fever	—	—	—	—	—	—	—
Malarial Fevers	345	—	—	—	6	—	13·21
Septic Diseases	6	—	—	—	—	—	·47
Tubercular Diseases	26	3	1	4	19	12	5·29
Syphilis, Primary	73	—	—	—	—	—	7·61
,, Secondary	185	1	—	1	11	4	19·63
Gonorrhœa	635	—	—	—	—	—	53·11
Hydrophobia	—	—	—	—	—	—	—
Parasitic Diseases	103	—	—	—	1	1	5·73
Scurvy	—	—	—	—	—	—	—
Alcoholism	38	3	—	3	—	—	1·81
Rheumatism	83	—	—	—	9	5	7·40
Debility	87	—	—	—	26	9	7·56
Other General Diseases	61	2	1	3	9	4	6·22
LOCAL DISEASES.							
Diseases of the—							
Nervous System { Nervous	55	—	1	1	13	8	6·40
Nervous System { Mental	18	—	—	—	19	16	4·84
Eye	117	—	—	—	18	9	9·22
Other Organs of Special Sense	84	—	—	—	13	10	7·02
Circulatory System	109	6	—	6	51	35	14·63
Respiratory ,,	150	4	—	4	4	1	10·56
Digestive ,,	571	3	1	4	13	4	23·91
Lymphatic ,,	41	—	—	—	1	—	2·69
Urinary ,,	12	—	—	—	4	4	1·04
Generative ,,	247	—	—	—	1	1	13·92
Organs of Locomotion	113	—	—	—	12	11	9·40
Connective Tissue	235	—	—	—	3	2	10·73
Skin	320	—	—	—	2	1	16·91
INJURIES.							
General	11	5	—	5	1	2	1·16
Local	752	9	—	9	14	7	42·82
In Action	—	—	—	—	—	—	—
POISONS	3	1	—	1	—	—	·03
No appreciable disease	48	—	—	—	—	—	1·95
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	5,782	54	5	59	390	154	422·28

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK among per 1,000 of the Strength and the Average Ratios for 10 years.

Ratio per 1,000.					Average Ratio per 1,000 from 1893 to 1902.				
Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.	Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
—	—	—	—	—	·1	·01	—	—	·02
1·0	—	—	—	·12	·6	·01	—	—	·06
5·3	—	—	—	·19	2·0	—	—	—	·08
·1	—	—	—	·01	·1	—	—	—	·01
2·1	·86	·43	—	·45	7·5	2·47	1·27	·01	1·30
127·8	·97	14·39	·75	11·64	171·6	1·08	9·03	·63	10·50
—	—	—	—	—	—	—	—	—	—
1·6	·11	·21	·11	·17	6·6	·27	·21	·04	·49
—	—	—	—	—	—	—	—	—	—
37·0	—	·64	—	1·42	68·9	·14	1·06	·07	2·45
·6	—	—	—	·05	·6	·11	—	·01	·05
2·8	·43	2·04	1·29	·57	2·8	·86	1 92	1·46	·58
7·8	—	—	—	·82	19·8	—	—	—	2·03
16·6	·11	1·18	·43	2·11	15·5	·06	·72	·36	1·74
68·2	—	—	—	5·70	79·4	—	·13	·06	6·20
—	—	—	—	—	—	—	—	—	—
11·1	—	·11	·11	·62	14·7	·01	·01	—	·50
—	—	—	—	—	—	—	—	—	—
4·1	·32	—	—	·19	3·0	·08	·02	—	·14
8·9	—	·97	·54	·79	20·7	·66	1·09	·21	1·54
9·3	—	2·79	·97	·81	10·0	—	1·61	·59	·87
6·6	·32	·97	·43	·67	7·3	·08	·39	·11	·55
5·9	·11	1·40	·86	·69	6·9	·16	1·27	·99	·47
1·9	—	2·04	1·72	·52	1·6	·01	1·61	1·69	·46
12·6	—	1·93	·97	·99	12·5	—	1·09	·49	·78
9·0	—	1·40	1·07	·75	12·5	·01	1·35	·55	·79
11·7	·64	5·48	3·76	1·57	8·7	·32	3·68	2·29	1·13
16·1	·43	·43	·11	1·13	21·1	·49	·88	·43	1·46
61·3	·43	1·40	·43	2·57	98·8	·50	·90	·28	3·33
4·4	—	·11	—	·29	8·1	—	·06	·06	·91
1·3	—	·43	·43	·11	1·6	·12	·25	·09	·16
26·5	—	·11	·11	1·49	36·3	—	·30	·09	2·43
12·1	—	1·29	1·18	1·01	9·1	·04	·75	·52	·66
25·2	—	·32	·21	1·15	34·0	—	·06	—	1·42
34·4	—	·21	·11	1·82	55·5	—	·19	·07	2·53
1·2	·54	·11	·21	·12	1·0	·80	·09	·05	·10
80·7	·97	1·50	·75	4·60	90·6	·63	·86	·32	4·12
—	—	—	—	—	—	—	—	·14	—
·3	·11	—	—	—	·3	·04	·01	—	·01
5·2	—	—	—	·21	6·6	—	—	—	·25
—	—	—	—	—	—	·01	—	—	—
620·9	6·34	41·88	16·54	45·34	836·4	8·37	30·83	11·61	50·12

ABSTRACT No. IIIA.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS ROYAL MALTA ARTILLERY stationed at MALTA during the year 1903,

Average Strength, 706. Diseases.	Admissions into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number Sent Home.	Invalids. Number finally Discharged the Service.	Average Number constantly sick.
GENERAL DISEASES.							
Small Pox	—	—	—	—	—	—	—
Other Eruptive Fevers	—	—	—	—	—	—	—
Influenza	23	—	—	—	—	—	1·32
Diphtheria	—	—	—	—	—	—	—
Enteric Fever	2	—	—	—	—	—	·76
Other Continued Fevers	35	—	—	—	—	—	2·35
Cholera	—	—	—	—	—	—	—
Dysentery	—	—	—	—	—	—	—
Yellow Fever	—	—	—	—	—	—	—
Malarial Fevers	—	—	—	—	—	—	—
Septic Diseases	—	—	—	—	—	—	—
Tubercular Diseases	2	—	—	—	—	3	·06
Syphilis, Primary	—	—	—	—	—	—	·01
,, Secondary	6	—	—	—	—	—	·08
Gonorrhœa	12	—	—	—	—	—	·66
Hydrophobia	—	—	—	—	—	—	—
Parasitic Diseases	7	—	—	—	—	—	·09
Scurvy	—	—	—	—	—	—	—
Alcoholism	—	—	—	—	—	—	—
Rheumatism	11	—	—	—	—	—	·55
Debility	4	—	—	—	—	—	·03
Other General Diseases	4	—	—	—	—	1	·04
LOCAL DISEASES.							
Diseases of the—							
Nervous System (Nervous)	2	—	—	—	—	2	·03
Nervous System (Mental)	1	—	—	—	—	1	·02
Eye	10	—	—	—	—	—	·17
Other Organs of Special Sense	—	—	—	—	—	—	—
Circulatory System	—	—	—	—	—	—	—
Respiratory ,,	25	—	—	—	—	1	·46
Digestive ,,	33	—	—	—	—	—	1·27
Lymphatic ,,	3	—	—	—	—	—	·11
Urinary ,,	—	—	—	—	—	—	—
Generative ,,	6	—	—	—	—	—	·20
Organs of Locomotion	7	—	—	—	—	—	·27
Connective Tissue	9	—	—	—	—	—	·56
Skin	34	—	—	—	—	—	·95
INJURIES.							
General	—	—	—	—	—	—	—
Local	45	—	—	—	—	—	2·08
In Action	—	—	—	—	—	—	—
POISONS	—	—	—	—	—	—	—
No appreciable disease	2	—	—	—	—	—	·03
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	283	—	—	—	—	8	12·10

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK among the with the Ratios per 1,000 of the Strength, and the Average Ratios for 10 years.

Ratio per 1,000.					Average Ratio per 1,000 from 1893 to 1902.				
Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.	Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	·8	—	—	—	·02
32·6	—	—	—	1·87	5·5	—	—	—	·17
—	—	—	—	—	—	—	—	—	—
2·8	—	—	—	1·08	·8	·17	—	—	·12
49·6	—	—	—	3·33	57·2	·17	—	—	2·37
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	·3	—	—	—	·08
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	·2	—	—	—	—
2·8	—	—	4·25	·08	3·0	·83	—	1·33	·33
—	—	—	—	·01	6·8	—	—	—	·55
8·5	—	—	—	·11	4·3	—	—	—	·28
17·0	—	—	—	·94	17·3	—	—	—	1·06
—	—	—	—	—	—	—	—	—	—
9·9	—	—	—	·13	2·7	—	—	—	·10
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	·7	—	—	—	·06
15·6	—	—	—	·78	17·3	—	—	·33	·68
5·7	—	—	—	·04	11·8	—	—	1·00	·55
5·7	—	—	1·42	·06	2·0	—	—	—	·12
2·8	—	—	2·83	·04	2·8	·17	—	·33	·21
1·4	—	—	1·42	·03	2·5	—	—	1·83	·15
14·2	—	—	—	·24	16·9	—	—	1·16	·90
—	—	—	—	—	4·8	—	—	·17	·18
—	—	—	—	—	1·5	·33	—	·66	·11
35·4	—	—	1·42	·65	30·8	·17	—	—	1·31
46·7	—	—	—	1·80	49·5	·33	—	1·16	1·57
4·3	—	—	—	·16	·3	—	—	—	·01
—	—	—	—	—	·2	—	—	—	—
8·5	—	—	—	·28	7·3	—	—	·17	·36
9·9	—	—	—	·38	2·2	—	—	1·15	·17
12·8	—	—	—	·79	14·6	—	—	—	·70
48·2	—	—	—	1·35	51·0	—	—	·50	1·96
—	—	—	—	—	—	—	—	—	—
63·7	—	—	—	2·95	77·7	—	—	·33	2·70
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	·17	—	—	—
2·8	—	—	—	·04	1·8	—	—	—	·0
—	—	—	—	—	—	—	—	—	—
400·9	—	—	11·33	17·14	395·1	2·33	—	10·13	16·90

ABSTRACT No. IV.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS the TROOPS stationed in CANADA during the Year 1903, with the

Average Strength, 1,986. Diseases.	Admissions into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number sent Home.	Invalids. Number finally Discharged the Service.	Average Number constantly Sick.
GENERAL DISEASES.							
Small-pox	—	—	—	—	—	—	—
Other Eruptive Fevers	2	—	—	—	—	—	·07
Influenza	37	—	—	—	—	—	1·48
Diphtheria	1	—	—	—	—	—	·06
Enteric Fever	1	—	—	—	—	—	—
Other Continued Fevers	—	—	—	—	—	—	—
Cholera	—	—	—	—	—	—	—
Dysentery	—	—	—	—	—	—	—
Yellow Fever	—	—	—	—	—	—	—
Malarial Fevers	8	—	—	—	—	—	·23
Septic Diseases	4	—	—	—	—	—	·23
Tubercular Diseases	3	1	—	1	—	—	1·33
Syphilis, Primary	10	—	—	—	—	—	1·17
,, Secondary	21	—	—	—	1	—	1·79
Gonorrhœa	90	—	—	—	3	—	8·31
Hydrophobia	—	—	—	—	—	—	—
Parasitic Diseases	14	—	—	—	—	—	·70
Scurvy	—	—	—	—	—	—	—
Alcoholism	9	1	—	1	—	—	·22
Rheumatism	44	—	—	—		1	2·80
Debility	15	—	—	—	4	4	·85
Other General Diseases	3	—	—	—	—	—	·17
LOCAL DISEASES.							
Diseases of the—							
Nervous System (Nervous)	15	—	—	—	3	4	·85
Nervous System (Mental)	4	—	—	—	4	3	·35
Eye	4	—	—	—	—	1	·09
Other Organs of Special Sense	3	—	—	—	—	—	·17
Circulatory System	13	1	1	2	5	3	1·19
Respiratory ,,	42	1	—	1	3	—	2·28
Digestive ,,	100	—	—	—	—	—	3·31
Lymphatic ,,	6	—	—	—	—	—	·72
Urinary ,,	3	—	—	—	2	1	·26
Generative ,,	18	—	—	—	1	1	·98
Organs of Locomotion	21	—	—	—	2	1	1·24
Connective Tissue	13	—	—	—	—	—	·52
Skin	23	—	—	—	1	—	1·66
INJURIES.							
General	—	—	—	—	—	—	—
Local	115	1	—	1	4	2	6·44
In Action	—	—	—	—	—	—	—
POISONS	—	—	—	—	—	—	—
No appreciable disease	2	—	—	—	—	—	·06
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	643	5	1	6	36	21	39·53

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK among Ratios per 1,000 of the Strength, and the Average Ratios for 10 years.

Ratio per 1,000.					Average Ratio per 1,000 from 1893 to 1902.				
Admissions.	Deaths.	Invalids sent Home.	Invalids finally discharged.	Constantly Sick.	Admissions.	Deaths.	Invalids sent Home.	Invalids finally discharged.	Constantly Sick.
—	—	—	—	—	—	—	—	—	—
1·0	—	—	—	·04	11·3	·38	—	—	·74
18·6	—	—	—	·75	35·5	—	—	—	·84
·5	—	—	—	·03	·1	·06	—	—	—
—	—	—	—	—	·4	·06	—	—	·07
—	—	—	—	—	1·2	—	—	—	·04
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	·4	—	—	—	·01
—	—	—	—	—	—	—	—	—	
4·0	—	—	—	·12	1·0	—	—	—	·04
2·0	—	—	—	·12	1·5	·13	·06	—	·14
1·5	·50	—	—	·67	2·4	·57	1·59	1·21	·28
5·0	—	—	—	·59	23·6	—	—	—	1·84
10·6	—	·50	—	·90	16·3	·19	·83	—	1·46
45·3	—	1·51	—	4·18	77·9	—	—	—	3·27
—	—	—	—	—	—	—	—	—	—
7·0	—	—	—	·35	9·4	—	·06	—	·29
—	—	—	—	—	—	—	—	—	—
4·5	·50	—	—	·11	4·8	·06	—	—	·17
22·2	—	1·51	·50	1·41	28·5	·06	·76	·38	1·61
7·6	—	2·01	2·01	·43	1·5	—	·38	·13	·08
1·5	—	—	—	·09	7·6	·06	·38	·13	·29
7·6	—	1·51	2·01	·43	7·6	·45	·89	1·02	·23
2·0	—	2·01	1·51	·18	1·1	—	1·02	1·06	·18
2·0	—	—	·50	·04	8·8	—	·64	·33	·37
1·5	—	—	—	·09	7·1	·06	·38	·13	·28
6·5	1·01	2·52	1·51	·60	5·3	·32	1·47	1·34	·42
21·1	·50	1·51	—	1·15	36·4	·70	·96	·45	1·54
50·4	—	—	—	1·67	105·5	·26	·38	·13	2·88
3·0	—	—	—	·36	14·6	—	·19	·13	1·33
1·5	—	1·01	·50	·13	2·9	·38	·45	·25	·18
9·1	—	·50	·50	·49	24·5	—	—	·06	1·13
10·6	—	1·01	·50	·62	11·1	—	·96	·76	·63
6·5	—	—	—	·26	23·2	—	—	—	1·00
11·6	—	·50	—	·83	39·5	—	·26	·25	1·50
—	—	—	—	—	·4	·57	—	—	·03
57·9	·50	2·01	1·01	3·24	109·9	·26	·70	·76	4·59
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	·1	·06	—	—	—
1·0	—	—	—	·03	1·5	—	—	—	·08
—	—	—	—	—	—	—	—	—	—
323·8	3·02	18·13	10·57	19·91	623·1	4·65	12·36	8 60	27 64

ABSTRACT No. V.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS the EUROPEAN TROOPS stationed at BERMUDA during the Year 1903, with

Average Strength, 2,577. Diseases.	Admissions into Hospital.	Deaths			Invalids.		Average Number constantly Sick.
		In the Command.	Of Invalids.	Total.	Number sent Home.	Number finally Discharged the Service.	
GENERAL DISEASES.							
Small-pox	—	—	—	—	—	—	—
Other Eruptive Fevers	—	—	—	—	—	—	·26
Influenza	24	—	—	—	—	—	·93
Diphtheria	—	—	—	—	—	—	—
Enteric Fever	46	1	—	1	5	—	8·03
Other Continued Fevers	61	—	—	—	1	—	3·19
Cholera	—	—	—	—	—	—	—
Dysentery	5	—	—	—	2	—	·63
Yellow Fever	—	—	—	—	—	—	—
Malarial Fevers	11	—	—	—	—	—	·54
Septic Diseases	—	—	—	—	—	—	—
Tubercular Diseases	4	—	—	—	4	2	·61
Syphilis, Primary	8	—	—	—	—	—	·62
,, Secondary	32	—	—	—	—	—	2·62
Gonorrhœa	39	—	—	—	—	—	2·35
Hydrophobia	—	—	—	—	—	—	—
Parasitic Diseases	87	—	—	—	—	—	2·50
Scurvy	—	—	—	—	—	—	—
Alcoholism	5	—	—	—	—	—	·15
Rheumatism	25	—	—	—	1	—	1·25
Debility	29	—	—	—	8	4	2·77
Other General Diseases	10	—	1	1	2	—	1·03
LOCAL DISEASES.							
Diseases of the—							
Nervous System { Nervous	14	—	—	—	9	7	1·31
Nervous System { Mental	6	—	—	—	4	4	·64
Eye	40	—	—	—	2	—	2·64
Other Organs of Special Sense	28	—	—	—	2	1	1·11
Circulatory System	36	1	—	1	11	7	3·10
Respiratory ,,	68	4	—	4	2	—	3·57
Digestive ,,	229	—	—	—	9	—	8·66
Lymphatic ,,	6	—	—	—	1	—	·23
Urinary ,,	12	—	—	—	—	—	·67
Generative ,,	23	—	—	—	—	1	1·97
Organs of Locomotion	23	—	—	—	2	1	·67
Connective Tissue	90	—	—	—	—	—	3·41
Skin	151	—	—	—	—	—	6·13
INJURIES.							
General	3	2	—	2	—	—	·16
Local	241	—	—	—	7	2	10·52
In Action	—	—	—	—	—	—	—
POISONS	1	—	—	—	—	—	·12
No appreciable disease	13	—	—	—	—	—	·57
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	1,370	8	1	9	72	29	72·96

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK among the Ratios per 1,000 of the Strength, and the average Ratios for 10 Years.

Ratio per 1,000.					Average Ratio per 1,000 from 1893 to 1902.				
Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.	Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
—	—	—	—	—	—	—	—	—	—
—	—	—	—	·10	·7	—	—	—	·05
9·3	—	—	—	·36	11·7	—	—	—	·36
—	—	—	—	—	—	—	—	—	—
17·8	·39	1·94	—	3·12	25·2	4·13	·14	—	4·22
23·7	—	·39	—	1·24	20·6	—	—	—	1·10
—	—	—	—	—	—	—	—	—	—
1·9	—	·78	—	·24	3·8	·28	·35	—	·28
—	—	—	—	—	—	—	—	—	—
4·3	—	—	—	·21	21·2	·14	8·89	—	2·42
—	—	—	—	—	·2	·14	—	—	·01
1·6	—	1·55	·78	·24	2·6	·84	1·26	·91	·33
3·1	—	—	—	·24	7·1	—	—	—	·62
12·4	—	—	—	1·02	10·5	—	1·26	·56	1·34
15·1	—	—	—	·91	19·9	—	·07	—	1·55
—	—	—	—	—	—	—	—	—	—
33·8	—	—	—	·97	11·3	—	—	—	·29
—	—	—	—	—	—	—	—	—	—
1·9	—	—	—	·06	6·6	·07	—	—	·22
9·7	—	·39	—	·49	16·0	—	·49	·07	·84
11·3	—	3·10	1·55	1·07	13·7	—	4·13	·21	·94
3·9	·39	·78	—	·40	4·1	—	·21	—	·21
5·4	—	3·49	2·72	·51	5·8	·35	1·12	·70	·47
2·3	—	1·55	1·55	·25	1·9	—	1·61	1·75	·48
15·5	—	·78	—	1·02	9·2	—	·42	·28	·36
10·9	—	·78	·39	·43	10·8	—	1·12	·77	·61
14·0	·39	4·27	2·72	1·20	8·2	·28	1·82	·98	·82
28·4	1·55	·78	—	1·39	17·1	·56	1·05	·49	1·14
33·9	—	3·49	—	3·36	82·5	·28	1·05	·14	2·50
2·3	—	·39	—	·09	6·0	—	·14	·07	·67
4·7	—	—	—	·26	2·2	·21	·35	·14	·22
3·9	—	—	·39	·76	10·4	—	·49	—	·57
3·9	—	·78	·39	·26	6·9	—	·63	·28	·44
34·9	—	—	—	1·32	35·5	—	—	—	1·37
36·6	—	—	—	2·38	37·2	—	·07	—	1·46
1·2	·78	—	—	·06	·5	1·05	—	—	·03
33·5	—	2·72	·78	4·06	90·9	·35	·56	·14	3·91
—	—	—	—	—	—	—	—	—	—
·4	—	—	—	·05	·2	—	—	—	·00
5·0	—	—	—	·22	1·7	—	—	—	·10
—	—	—	—	—	—	—	—	—	—
531·6	3·49	27·94	11·25	28·31	502·2	9·68	27·24	7·49	29·93

ABSTRACT No. VI.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS the NON-EUROPEAN TROOPS stationed at BERMUDA during the Year 1903,

Average Strength, 202. Diseases.	Admissions into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number sent Home.	Invalids. Number finally Discharged the Service.	Average Number constantly Sick.
GENERAL DISEASES.							
Small-pox	—	—	—	—	—	—	—
Other Eruptive Fevers	—	—	—	—	—	—	—
Influenza	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—
Enteric Fever	—	—	—	—	—	—	·02
Other Continued Fevers	—	—	—	—	—	—	—
Cholera	—	—	—	—	—	—	—
Dysentery	3	—	—	—	—	—	·08
Yellow Fever	—	—	—	—	—	—	—
Malarial Fevers	20	1	—	1	—	—	·85
Septic Diseases	1	—	—	—	—	—	·05
Tubercular Diseases	3	—	—	—	4	5	·29
Syphilis, Primary	—	—	—	—	—	—	·61
,, Secondary	15	—	—	—	4	2	1·80
Gonorrhœa	14	—	—	—	1	1	1·27
Hydrophobia	—	—	—	—	—	—	—
Parasitic Diseases	4	—	—	—	—	—	·30
Scurvy	—	—	—	—	—	—	—
Alcoholism	—	—	—	—	—	—	—
Rheumatism	4	—	—	—	—	—	·32
Debility	—	—	—	—	—	—	—
Other General Diseases	—	—	—	—	—	—	—
LOCAL DISEASES.							
Diseases of the—							
Nervous System (Nervous)	—	—	—	—	—	—	—
Nervous System (Mental)	—	—	—	—	—	—	—
Eye	2	—	—	—	—	—	·06
Other Organs of Special Sense	—	—	—	—	—	—	—
Circulatory System	—	—	—	—	—	—	—
Respiratory ,,	8	—	—	—	—	—	·67
Digestive ,,	6	—	—	—	—	—	·19
Lymphatic ,,	6	—	—	—	1	1	·39
Urinary ,,	—	—	—	—	1	—	·04
Generative ,,	1	—	—	—	—	—	·11
Organs of Locomotion	3	—	—	—	1	1	·24
Connective Tissue	5	—	—	—	—	—	·28
Skin	2	—	—	—	—	—	·06
INJURIES.							
General	—	1	—	1	—	—	—
Local	4	—	—	—	—	—	·20
In Action	—	—	—	—	—	—	—
POISONS	—	—	—	—	—	—	—
No appreciable disease	2	—	—	—	—	—	·04
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	103	2	—	2	12	10	7·87

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK among with the Ratios per 1,000 of the Strength, and the average Ratios for 4 Years.

Ratio per 1,000.					Average Ratio per 1,000 from 1899 to 1902.				
Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.	Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	4·5	—	—	—	·33
—	—	—	—	—	1·8	—	—	—	·06
—	—	—	—	—	—	—	—	—	—
—	—	—	—	·10	·4	—	—	—	·05
—	—	—	—	—	8·9	—	—	—	·44
—	—	—	—	—	—	—	—	—	—
14·9	—	—	—	·40	1·8	·45	—	—	·18
—	—	—	—	—	—	—	—	—	—
99·0	4·95	—	—	4·21	52·7	·45	2·23	1·34	2·81
4·9	—	—	—	·25	—	—	—	—	—
14·9	—	19·80	24·75	1·44	10·7	4·02	7·14	7·14	1·57
—	—	—	—	3·02	8·5	—	—	—	1·88
74·3	—	19·80	9·90	8·91	17·9	·45	5·80	6·25	2·88
63·3	—	4·93	4·95	6·29	33·9	—	-	·45	3·11
—	—	—	-	—	- -	—	—	—	—
19·8	—	—	—	1·48	33·9	—	—	—	·79
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	·4	- -	—	—	—
19·8	—	—	—	1·38	25·0	—	3·12	2·23	1·72
—	—	—	—	—	12·5	—	4·02	·89	·95
—	—	—	—	—	2·2	—	—	—	·12
—	—	—	—	—	4·5	—	1·34	·45	·25
—	—	—	—	—	—	—	—	—	—
9·9	—	—	—	·30	24·1	—	2·68	·89	2·35
—	—	—	—	—	6·2	—	1·79	1·79	·45
—	—	—	—	—	40·6	3·57	12·49	8·48	3·63
39·6	—	—	—	3·32	47·3	·89	2·68	·89	3·17
29·7	—	—	—	·94	41·5	·89	2·23	·89	1·91
29·7	—	4·95	4·95	1·93	6·7	—	·89	·45	1·11
—	—	4·95	—	·20	7·1	·45	2·23	1·79	·61
4·9	—	—	- -	·54	21·0	—	1·79	·89	1·91
14·9	—	4·95	4·95	1·19	7·6	—	1·34	·89	·75
24·8	—	—	—	1·40	13·8	—	—	—	·64
9·9	—	—	—	·30	12·5	—	·89	·89	·91
—	4·95	—	—	—	—	—	—	—	—
19·8	—	—	—	·99	36·6	·45	·45	·45	2·03
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
9·9	—	—	—	·20	—	—	—	—	—
—	—	—	- -	—	—	—	—	—	—
509·9	9·90	59·41	49·50	38·96	484·6	11·60	53·10	37·04	36·61

ABSTRACT No. VII.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS the EUROPEAN TROOPS stationed at BARBADOS during the Year 1903, with

Average Strength, 882. Diseases.	Admissions into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number sent Home.	Invalids. Number finally Discharged the Service.	Average Number constantly Sick.
GENERAL DISEASES.							
Small-pox	—	—	—	—	—	—	—
Other Eruptive Fevers	5	—	—	—	—	—	·42
Influenza	14	—	—	—	—	—	·38
Diphtheria	—	—	—	—	—	—	—
Enteric Fever	2	—	—	—	—	—	·60
Other Continued Fevers	41	—	—	—	1	—	1·13
Cholera	—	—	—	—	—	—	—
Dysentery	2	—	—	—	—	—	·16
Yellow Fever	—	—	—	—	—	—	—
Malarial Fevers	38	—	—	—	2	—	1·82
Septic Diseases	—	—	—	—	—	—	—
Tubercular Diseases	5	—	—	—	2	3	·68
Syphilis, Primary	52	—	—	—	1	—	4·96
,, Secondary	26	—	—	—	—	—	2·48
Gonorrhœa	108	—	—	—	—	—	6·84
Hydrophobia	—	—	—	—	—	—	—
Parasitic Diseases	31	—	—	—	—	—	1·30
Scurvy	—	—	—	—	—	—	—
Alcoholism	1	—	—	—	—	—	·05
Rheumatism	17	—	—	—	1	—	1·09
Debility	14	—	—	—	1	1	·85
Other General Diseases	8	—	—	—	1	—	·38
LOCAL DISEASES.							
Diseases of the—							
Nervous System { Nervous	6	—	—	—	2	—	·24
Nervous System { Mental	—	—	—	—	1	1	·01
Eye	9	—	—	—	—	—	·36
Other Organs of Special Sense	10	—	—	—	—	—	·29
Circulatory System	19	2	—	2	8	2	1·77
Respiratory ,,	12	1	—	1	—	—	1·11
Digestive ,,	56	—	—	—	5	1	3·00
Lymphatic ,,	35	—	—	—	—	—	4·19
Urinary ,,	2	—	—	—	1	1	·20
Generative ,,	94	—	—	—	—	—	6·72
Organs of Locomotion	6	—	—	—	—	1	·38
Connective Tissue	27	—	—	—	—	—	1·01
Skin	59	—	—	—	—	—	2·22
INJURIES.							
General	—	—	—	—	—	—	—
Local	88	2	—	2	—	—	3·16
In Action	—	—	—	—	—	—	—
POISONS	—	—	—	—	—	—	—
No appreciable disease	2	—	—	—	—	—	·04
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	789	5	—	5	26	10	47·85

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK, among the Ratios per 1,000 of the Strength, and the Average Ratios for 10 Years.

Ratio per 1,000.					Average Ratio per 1,000 from 1893 to 1902.				
Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.	Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
—	—	—	—	—	·1	—	—	—	·01
5·7	—	—	—	·48	5·9	—	—	—	·28
15·9	—	—	—	·43	10·4	—	—	—	·31
—	—	—	—	—	·1	·13	—	—	—
2·3	—	—	—	·68	1·9	1·00	·13	—	·26
46·5	—	1·13	—	1·28	81·5	—	·13	—	2.68
—	—	—	—	—	—	—	—	—	—
2·3	—	—	—	·18	1·8	·13	·13	—	·15
—	—	—	—	—	2·0	1·13	—	—	·09
43·1	—	2·27	—	2·07	124·5	2·01	1·00	·38	4·03
—	—	—	—	—	·1	—	—	—	—
5·7	—	2·27	3·40	·77	2·8	·63	2·14	1·38	·53
59·0	—	1·13	—	5·62	105·8	—	—	—	10·18
29·5	—	—	—	2·81	67·2	·25	4·40	1·76	7·96
122·4	—	—	—	7·75	157·1	—	·13	·13	12·12
—	—	—	—	—	—	—	—	—	—
35·1	—	—	—	1·47	24·1	—	—	—	·80
—	—	—	—	—	—	—	—	—	—
1·1	—	—	—	·06	15·5	·25	—	—	·36
19·3	—	1·13	—	1·24	39·7	—	1·13	·38	2·21
15·9	—	1·13	1·13	·96	18·8	—	2·38	·63	1·18
9·1	—	1·13	—	·43	11·2	·50	1·13	·50	·83
6·8	—	2·27	—	·27	10·2	·25	1·51	1·38	·82
—	—	1·13	1·13	·01	1·0	—	·75	1·26	·15
10·2	—	—	—	·41	8·8	—	·88	1·00	·44
11·3	—	—	—	·34	23·4	—	1·63	1·13	1·17
21·6	2·27	9·07	2·27	2·01	10·8	·25	3·51	2·26	1·23
13·6	1·13	—	—	1·26	16·5	·25	·63	·50	1·12
63·5	—	5·67	1·13	3·40	90·3	·38	1·13	·38	3·10
39·7	—	—	—	4·75	54·4	—	·50	·13	6·76
2·3	—	1·13	1·13	·23	2·6	·38	·38	·13	·24
106·6	—	—	—	7·62	101·9	—	·13	—	7·84
6·8	—	—	1·13	·43	14·1	·13	·75	·38	·86
30·6	—	—	—	1·14	38·7	—	—	—	1·53
66·9	—	—	—	2·52	57·8	—	·25	·13	2·50
—	—	—	—	—	·4	·63	—	—	·02
39·6	2·27	—	—	3·58	118·2	·50	·38	·25	4·33
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	·4	·13	—	—	—
2·3	—	—	—	·05	3·1	—	—	—	·06
—	—	—	—	—	—	—	—	—	—
894·6	5·67	29·49	11·34	54·25	1223·1	8·92	25·13	14·07	76·15

ABSTRACT No. VIII.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS the NON-EUROPEAN TROOPS stationed at BARBADOS during the year 1903,

Average Strength, 656. Diseases.	Admissions into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number sent from Jamaica.	Invalids. Number finally Discharged the Service.	Average Number constantly Sick.
GENERAL DISEASES.							
Small-pox	—	—	—	—	—	—	—
Other Eruptive Fevers	—	—	—	—	—	—	—
Influenza	6	—	—	—	—	—	·20
Diphtheria	—	—	—	—	—	—	—
Enteric Fever	—	—	—	—	—	—	—
Other Continued Fevers	14	—	—	—	—	—	·40
Cholera	—	—	—	—	—	—	—
Dysentery	3	—	—	—	—	—	·25
Yellow Fever	—	—	—	—	—	—	—
Malarial Fevers	56	—	—	—	—	—	2·06
Septic Diseases	—	—	—	—	—	—	—
Tubercular Diseases	6	2	—	2	—	7	1·31
Syphilis, Primary	44	—	—	—	—	—	4·55
„ Secondary	25	—	—	—	—	10	2·71
Gonorrhœa	93	—	—	—	—	—	5·41
Hydrophobia	—	—	—	—	—	—	—
Parasitic Diseases	4	—	—	—	—	—	·12
Scurvy	—	—	—	—	—	—	—
Alcoholism	—	—	—	—	—	—	—
Rheumatism	34	1	—	1	—	—	1·49
Debility	1	—	—	—	—	—	·07
Other General Diseases	1	—	—	—	—	—	·03
LOCAL DISEASES.							
Diseases of the—							
Nervous System { Nervous	2	—	—	—	—	—	·02
Nervous System { Mental	—	—	—	—	—	1	—
Eye	8	—	—	—	—	—	·76
Other Organs of Special Sense	—	—	—	—	—	—	—
Circulatory System	7	1	—	1	—	3	·89
Respiratory „	5	—	—	—	—	—	·17
Digestive „	27	—	—	—	—	3	1·00
Lymphatic „	5	—	—	—	—	—	·61
Urinary „	3	1	—	1	—	1	·43
Generative „	43	—	—	—	—	2	3·10
Organs of Loccmotion	4	—	—	—	—	—	·27
Connective Tissue	9	—	—	—	—	—	·39
Skin	13	—	—	—	—	—	·60
INJURIES.							
General	1	2	—	2	—	—	·03
Local	34	1	—	1	—	—	1·06
In Action	—	—	—	—	—	—	—
POISONS	—	—	—	—	—	—	—
No appreciable disease	1	—	—	—	—	—	·02
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	449	8	—	8	—	27	27·95

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK among with the Ratios per 1,000 of the Strength, and the Average Ratios for 10 years.

Ratio per 1,000.					Average Ratio per 1,000 from 1893 to 1902.				
Admissions.	Deaths.	Invalids sent from Jamaica	Invalids finally Discharged.	Constantly Sick.	Admissions.	Deaths.	Invalids sent from Jamaica.	Invalids finally Discharged.	Constantly Sick.
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	3·9	—	—	—	·13
9·1	—	—	—	·30	6·5	—	—	—	·19
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	·6	·41	—	—	·08
21·3	—	—	—	·61	60·7	—	—	—	1·61
—	—	—	—	—	—	—	—	—	—
4·6	—	—	—	·28	3·9	·20	—	·20	·29
—	—	—	—	—	·2	·20	—	—	—
85·4	—	—	—	3·14	122·1	1·22	—	·61	3·81
—	—	—	—	—	—	—	—	—	—
9·1	3·05	—	10·67	2·00	13·0	3·87	—	7·73	1·84
67·1	—	—	—	6·94	83·9	—	—	—	7·30
38·1	—	—	15·24	4·13	58·6	·20	—	12·42	6·75
141·8	—	—	—	8·25	119·1	—	—	—	7·10
—	—	—	—	—	—	—	—	—	—
6·1	—	—	—	·18	14·2	—	—	—	·58
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	1·6	—	—	—	·06
51·8	1·52	—	—	2·27	53·5	—	—	1·43	3·26
1·5	—	—	—	·11	10·8	—	—	·82	·78
1·5	—	—	—	·06	6·5	·41	—	·20	·39
3·0	—	—	—	·03	7·7	—	—	·81	·35
—	—	—	1·52	—	1·6	—	—	1·63	·29
12·2	—	—	—	1·16	17·1	—	—	·20	1·01
—	—	—	—	—	3·7	—	—	·41	·18
10·7	1·52	—	4·57	1·36	10·8	·82	—	3·46	1·11
7·6	—	—	—	·28	34·8	1·22	—	·61	2·16
41·2	—	—	4·57	1·52	76·5	·61	—	1·43	2·52
7·6	—	—	—	·93	28·7	·20	—	·61	2·50
4·6	1·52	—	1·52	·66	3·1	—	—	1·22	·32
65·6	—	—	3·05	4·73	96·9	—	—	·41	7·43
6·1	—	—	—	·41	8·6	—	—	2·04	·84
13·7	—	—	—	·59	25·0	—	—	·20	1·41
19·8	—	—	—	·91	26·9	—	—	—	1·54
1·5	3·05	—	—	·05	—	·20	—	—	—
51·8	1·52	—	—	1·62	63·1	·41	—	·81	2·45
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	·2	—	—	—	·01
1·5	—	—	—	·03	6·1	—	—	—	·11
—	—	—	—	—	—	—	—	—	—
684·5	12·20	—	41·16	42·61	970·1	9·97	—	37·25	58·40

ABSTRACT No. IX.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS the EUROPEAN TROOPS stationed at JAMAICA during the Year 1903, with the

Average Strength, 564. Diseases.	Admissions into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number sent Home.	Invalids. Number finally Discharged the Service.	Average Number constantly Sick.
GENERAL DISEASES.							
Small-pox	—	—	—	—	—	—	—
Other Eruptive Fevers	—	—	—	—	—	—	—
Influenza	11	—	—	—	—	—	·26
Diphtheria	—	—	—	—	—	—	—
Enteric Fever	—	—	—	—	—	—	—
Other Continued Fevers	—	—	—	—	—	—	·02
Cholera	—	—	—	—	—	—	—
Dysentery	2	—	—	—	—	—	·08
Yellow Fever	5	—	—	—	—	—	·29
Malarial Fevers	107	—	—	—	—	—	3·27
Septic Diseases	—	—	—	—	—	—	—
Tubercular Diseases	1	—	—	—	—	—	·07
Syphilis, Primary	28	—	—	—	—	—	2·74
,, Secondary	13	—	—	—	3	1	1·80
Gonorrhœa	71	—	—	—	—	—	4·32
Hydrophobia	—	—	—	—	—	—	—
Parasitic Diseases	7	—	—	—	—	—	·34
Scurvy	—	—	—	—	—	—	—
Alcoholism	2	—	—	—	—	—	·12
Rheumatism	4	—	—	—	—	—	·09
Debility	6	—	—	—	1	—	·22
Other General Diseases	3	1	—	1	—	—	·09
LOCAL DISEASES.							
Diseases of the—							
Nervous System { Nervous	4	—	—	—	—	—	·20
Nervous System { Mental	2	—	—	—	2	3	·10
Eye	10	—	—	—	—	—	·96
Other Organs of Special Sense	6	—	—	—	1	2	·26
Circulatory System	7	—	—	—	5	4	·66
Respiratory ,,	11	—	—	—	—	—	·60
Digestive ,,	28	—	—	—	—	—	·79
Lymphatic ,,	23	—	—	—	—	—	2·09
Urinary ,,	2	1	—	1	—	—	·16
Generative ,,	15	—	—	—	—	—	1·19
Organs of Locomotion	14	—	—	—	—	—	·53
Connective Tissue	20	—	—	—	1	1	1·37
Skin	21	—	—	—	—	—	·94
INJURIES.							
General	—	—	—	—	—	—	—
Local	46	—	—	—	—	—	1·64
In Action	—	—	—	—	—	—	—
POISONS	2	—	—	—	—	—	·07
No appreciable disease	4	—	—	—	—	—	·08
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	475	2	—	2	13	11	25·35

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK among Ratios per 1,000 of the Strength, and the Average Ratios for 10 Years.

Ratio per 1,000.					Average Ratio per 1,000 from 1893 to 1902.				
Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.	Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	·7	—	—	—	·03
19·5	—	—	—	·46	20·9	—	—	—	·60
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	7·7	2·57	·34	—	1·03
—	—	—	—	·04	41·8	—	—	—	1·41
—	—	—	—	—	—	—	—	—	—
3·5	—	—	—	·14	10·6	·17	·17	—	·62
8·9	—	—	—	·52	3·8	2·05	—	—	·25
189·7	—	—	—	5·80	69·0	1·03	·86	—	3·49
—	—	—	—	—	·3	—	—	—	·01
1·8	—	—	—	·12	4·3	·68	3·25	1·88	·87
49·7	—	—	—	4·86	67·6	—	—	—	6·33
23·1	—	5·32	1·77	3·19	41·4	—	3·25	·68	3·99
125·9	—	—	—	7·66	94·8	—	·34	—	6·55
—	—	—	—	—	—	—	—	—	—
12·4	—	—	—	·60	5·1	—	—	—	·18
—	—	—	—	—	—	—	—	—	—
3·5	—	—	—	·21	5·0	·17	—	—	·15
7·1	—	—		·16	20·9	—	·86	·17	1·44
10·6	—	1·77	—	·39	9·1	—	2·23	·34	·52
5·3	1·77	—	—	·16	3·9	—	·17	·17	·37
7·1	—	—	—	·36	4·1	—	1·20	1·20	·40
3·5	—	3·55	5·32	·18	1·2	·17	1·20	1·20	·16
17·7	—	—	—	1·70	9·4	—	·86	·51	·64
10·6	—	1·77	3·55	·46	15·1	—	2·05	1·03	·80
12·4	—	8·87	7·09	1·17	7·7	·51	3·59	2·91	·90
19·5	—	—	—	1·06	20·2	·17	—	—	1·04
49·7	—	—	—	1·40	65·1	·68	3·08	1·03	2·60
40·8	—	—	—	3·71	30·5	—	·17	—	4·22
3·5	1·77	—	—	·28	1·0	—	—	·17	·10
26·6	—	—	—	2·11	30·6	—	·51	1·20	2·07
24·8	—	—	—	·94	13·0	—	2·40	—	1·20
35·5	—	1·77	1·77	2·43	27·7	—	·17	—	1·17
37·2	—	—	—	1·67	30·5	—	·17	·17	1·39
—	—	—	—	—	1·9	1·20	—	—	·08
81·6	—	—	—	2·91	103·2	2·40	2·74	1·20	4·74
—	—	—	—	—	—	—	—	—	—
3·5	—	—	—	·12	·3	·17	—	—	·01
7·1	—	—	—	·14	1·7	—	—	—	·08
—	—	—	—	—	—	—	—	—	—
842·2	3·55	23·05	19·50	44·95	770·1	11·98	29·61	13·86	49·44

ABSTRACT No. X.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS the NON-EUROPEAN TROOPS stationed at JAMAICA during the Year 1903, with

Average Strength, 1,175. Diseases.	Admissions into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number sent Home.	Invalids. Number finally discharged the service.	Average Number constantly Sick.
GENERAL DISEASES.							
Small-pox	—	—	—	—	—	—	—
Other Eruptive Fevers	9	—	—	—	—	—	·28
Influenza	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—
Enteric Fever	1	—	—	—	—	—	—
Other Continued Fevers	—	—	—	—	—	—	—
Cholera	—	—	—	—	—	—	—
Dysentery	4	—	—	—	—	—	·25
Yellow Fever	—	—	—	—	—	—	—
Malarial Fevers	193	1	—	1	—	2	5·99
Septic Diseases	—	—	—	—	—	—	—
Tubercular Diseases	9	5	—	5	—	6	1·56
Syphilis, Primary	91	—	—	—	—	1	6·29
,, Secondary	64	—	—	—	—	12	5·34
Gonorrhœa	155	—	—	—	—	—	10·61
Hydrophobia	—	—	—	—	—	—	—
Parasitic Diseases	20	—	—	—	—	—	1·12
Scurvy	—	—	—	—	—	—	—
Alcoholism	—	—	—	—	—	—	—
Rheumatism	46	—	—	—	—	2	2·20
Debility	6	—	—	—	—	1	·49
Other General Diseases	9	—	—	—	—	2	2·16
LOCAL DISEASES.							
Diseases of the—							
Nervous System (Nervous)	5	—	—	—	—	1	1·10
Nervous System (Mental)	—	—	—	—	—	—	·13
Eye	16	—	—	—	—	2	1·50
Other Organs of Special Sense	—	—	—	—	—	—	—
Circulatory System	31	1	—	1	—	20	6·14
Respiratory ,,	40	3	—	3	—	1	2·37
Digestive ,,	91	—	—	—	—	1	3·39
Lymphatic ,,	36	—	—	—	—	—	4·49
Urinary ,,	2	—	—	—	—	1	·24
Generative ,,	70	—	—	—	—	—	5·91
Organs of Locomotion	11	—	—	—	—	1	·99
Connective Tissue	37	—	—	—	—	—	2·90
Skin	15	—	—	—	—	—	·86
INJURIES.							
General	—	1	—	1	—	—	—
Local	54	—	—	—	—	2	2·37
In Action	—	—	—	—	—	—	—
POISONS	—	—	—	—	—	—	—
No appreciable disease	8	—	—	—	—	—	·05
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	1,022	11	—	11	—	53	68·73

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK among the Ratios per 1,000 of the Strength, and the Average Ratios for 10 years.

Ratio per 1,000.					Average Ratio per 1,000 from 1893 to 1902.				
Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.	Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
—	—	—	—	—	—	—	—	—	—
7·7	—	—	—	·24	7·9	—	—	—	·33
—	—	—	—	—	17·0	—	—	—	·60
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	3·3	1·27	—	—	·42
—	—	—	—	—	44·6	—	—	—	1·39
—	—	—	—	—	—	—	—	—	—
3·4	—	—	—	·21	24·4	·49	—	—	1·39
—	—	—	—	—	·6	·19	—	—	·04
164·3	·85	—	1·70	5·10	256·6	2·43	—	2·34	11·65
—	—	—	—	—	—	—	—	—	—
7·7	4·26	—	5·11	1·33	13·1	2·24	—	7·40	1·73
77·4	—	—	·85	5·35	140·6	—	—	—	12·75
54·5	—	—	10·21	4·54	38·0	·10	—	9·64	4·60
131·9	—	—	—	9·03	157·6	—	—	·10	11·79
—	—	—	—	—	—	—	—	—	—
17·0	—	—	—	·95	39·7	—	—	—	1·34
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	·3	·10	—	—	·01
39·1	—	—	1·70	1·87	31·8	—	—	3·80	2·31
5·1	—	—	·85	·42	12·4	—	—	3·70	1·02
7·7	—	—	1·70	1·84	18·3	·10	—	1·36	·85
4·3	—	—	·85	·94	7·9	—	—	2·14	·64
—	—	—	—	·11	1·3	—	—	1·17	·20
13·6	—	—	1·70	1·28	23·7	—	—	3·02	1·90
—	—	—	—	—	9·3	—	—	·49	·47
26·4	·85	—	17·02	5·23	26·7	·29	—	9·25	2·71
34·0	2·55	—	·85	2·02	47·5	·97	—	1·65	3·30
77·4	—	—	·85	2·88	81·1	·19	—	2·24	2·81
30·6	—	—	—	3·82	28·6	—	—	·78	2·92
1·7	—	—	·85	·20	1·7	·19	—	·29	·14
59·6	—	—	—	5·03	23·3	—	—	1·46	1·80
9·4	—	—	·85	·84	11·5	·10	—	·87	·78
31·5	—	—	—	2·47	27·1	—	—	—	1·66
12·8	—	—	—	·73	44·5	—	—	2·14	3·24
—	·85	—	—	—	·3	·58	—	—	·01
45·9	—	—	1·70	2·02	79·8	—	—	1·75	4·10
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	·2	—	—	—	·00
6·8	—	—	—	·04	1·8	—	—	—	·05
—	—	—	—	—	—	—	—	—	—
869·8	9·36	—	46·81	58·49	1,222·5	9·25	—	55·59	78 96

ABSTRACT No. XI.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS the EUROPEAN TROOPS stationed at WESTERN AFRICA during the Year 1903,

Average Strength, 198. Diseases.	Admissions into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number sent Home.	Invalids. Number finally Discharged the Service.	Average Number constantly Sick.
GENERAL DISEASES.							
Small-pox	—	—	—	—	—	—	—
Other Eruptive Fevers	—	—	—	—	—	—	—
Influenza	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—
Enteric Fever	—	—	—	—	—	—	—
Other Continued Fevers	—	—	—	—	—	—	—
Cholera	—	—	—	—	—	—	—
Dysentery	5	—	—	—	1	—	·17
Yellow Fever	—	—	—	—	—	—	—
Malarial Fevers	259	2	—	2	11	—	6·89
Septic Diseases	—	—	—	—	—	—	—
Tubercular Diseases	—	—	—	—	—	—	—
Syphilis, Primary	4	—	—	—	—	—	·60
,, Secondary	10	—	—	—	1	—	·74
Gonorrhœa	18	—	—	—	—	—	1·02
Hydrophobia	—	—	—	—	—	—	—
Parasitic Diseases	2	—	—	—	—	—	·05
Scurvy	—	—	—	—	—	—	—
Alcoholism	1	—	—	—	—	—	·01
Rheumatism	1	—	—	—	—	—	·03
Debility	11	—	—	—	4	—	·39
Other General Diseases	—	—	—	—	—	—	—
LOCAL DISEASES.							
Diseases of the—							
Nervous System (Nervous)	3	—	—	—	—	—	·13
Nervous System (Mental)	1	1	—	1	—	—	·08
Eye	1	—	—	—	—	—	·04
Other Organs of Special Sense	1	—	—	—	—	—	·02
Circulatory System	3	—	—	—	1	1	·42
Respiratory ,,	1	—	—	—	—	—	·02
Digestive ,,	21	—	—	—	—	—	·41
Lymphatic ,,	2	—	—	—	—	—	·09
Urinary ,,	1	—	—	—	—	—	·03
Generative ,,	11	—	—	—	—	—	·99
Organs of Locomotion	1	—	—	—	—	—	·15
Connective Tissue	5	—	—	—	—	—	·24
Skin	5	—	—	—	—	—	·18
INJURIES.							
General	—	—	—	—	—	—	—
Local	15	—	—	—	—	—	·63
In Action	—	—	—	—	—	—	—
POISONS	—	—	—	—	—	—	—
No appreciable disease	—	—	—	—	—	—	—
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	382	3	—	3	18	1	13·33
Average of 10 years, 1893–1902	—	—	—	—	—	—	—

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK among with the Ratios per 1,000 of the Strength, and the Average Ratios for 10 years.

Ratio per 1,000.					* Average Ratio per 1,000 from 1897 to 1902.				
Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.	Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
25·3	—	5·05	—	·66	7·5	1·88	1·88	—	·81
—	—	—	—	—	—	—	—	—	—
1,308·1	10·10	55·56	—	34·80	1,655·4	15·07	99·81	1·88	50·06
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
20·2	—	—	—	3·03	41·4	—	1·88	—	3·65
50·5	—	5·05	—	3·74	39·6	—	3·77	—	2·39
90·9	—	—	—	5·15	71·6	—	1·88	—	4·90
—	—	—	—	—	—	—	—	—	—
10·1	—	—	—	·25	7·5	—	—	—	·23
—	—	—	—	—	—	—	—	—	—
5·0	—	—	—	·05	22·6	—	1·88	—	·79
5·0	—	—	—	·15	18·8	—	1·88	-	1·46
55·6	—	20·20	—	1·97	39·6	—	9·42	1·88	1·39
—	—	—	—	—	7·5	1·88	—	1·88	·19
15·2	—	—	—	·66	15·1	1·88	1·88	—	·30
5·0	5·05	—	—	·40	1·9	—	1·88	1·88	·19
5·0	—	—	—	·20	18·8	—	—	—	·75
5·0	—	—	—	·10	—	—	—	—	—
15·2	—	5·05	5·05	2·12	18·8	3·77	5·65	3·77	·72
5·0	—	—	—	·10	9·4	—	—	—	·40
106·1	—	—	—	2·07	103·6	1·88	5·65	1·88	5·44
10·1	—	—	—	·45	41·4	—	1·88	—	3·77
5·0	—	—	—	·15	3·8	—	—	—	·09
55·6	—	—	—	5·00	45·2	—	5·65	—	2·79
5·0	—	—	—	·76	9·4	—	3·77	—	·28
25·3	—	—	—	1·21	20·7	—	—	—	·62
25·3	—	—	—	·91	20·7	—	—	—	1·02
—	—	—	—	—	3·8	1·88	—	—	·06
75·8	—	—	—	3·18	64·0	—	1·88	—	2·35
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	1·9	—	—	—	·04
—	—	—	—	—	3·8	—	—	—	·06
—	—	—	—	—	—	—	—	—	—
1,929·3	15·15	90·91	5·05	67·32	2,293·8	28·25	150·66	13·18	84·78
2,402·8	32·62	181·56	12·77	85·84	—	—	—	--	—

* The average ratios for 10 years will be given in future years. See footnote to Report for 1898.

ABSTRACT No. XII.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS NON-EUROPEAN TROOPS stationed in WESTERN AFRICA during the Year 1903,

Average Strength, 2,269. Diseases.	Admissions into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number sent to West Indies.	Invalids. Number finally Discharged the Service.	Average Number constantly Sick.
GENERAL DISEASES.							
Small-pox	—	—	—	—	—	—	—
Other Eruptive Fevers	2	—	—	—	—	1	·03
Influenza	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—
Enteric Fever		—	—	—	—	—	—
Other Continued Fevers	3	—	—	—	—	—	·01
Cholera	—	—	—	—	—	—	—
Dysentery	9	—	—	—	—	—	·59
Yellow Fever	—	—	—	—	—	—	—
Malarial Fevers	1,674	1	—	1	11	6	39·53
Septic Diseases	—	—	—	—	—	—	—
Tubercular Diseases	4	2	—	2	1	1	·54
Syphilis, Primary	11	—	—	—	—	—	2·97
" Secondary	61	1	—	1	3	5	8·26
Gonorrhœa	267	—	—	—	1	3	18·00
Hydrophobia	—	—	—	—	—	—	—
Parasitic Diseases	29	—	—	—	—	—	1·48
Scurvy	—	—	—	—	—	—	—
Alcoholism	—	—	—	—	—	—	—
Rheumatism	90	—	—	—	1	6	7·46
Debility	11	—	—	—	2	2	·47
Other General Diseases	21	1	—	1	2	2	1·46
LOCAL DISEASES.							
Diseases of the—							
Nervous System { Nervous	10	—	—	—	—	2	·28
Nervous System { Mental	6	—	—	—	2	2	·88
Eye	53	—	—	—	—	1	2·57
Other Organs of Special Sense	3	—	—	—	—	—	·08
Circulatory System	36	—	1	1	15	16	3·97
Respiratory "	81	4	—	4	2	4	5·25
Digestive "	100	—	—	—	1	3	4·22
Lymphatic "	67	—	—	—	1	5	3·83
Urinary "	3	—	—	—	1	2	·20
Generative "	140	1	—	1	—	1	8·20
Organs of Locomotion	24	—	—	—	—	—	1·63
Connective Tissue	104	—	—	—	—	—	3·65
Skin	267	—	—	—	—	—	14·48
INJURIES.							
General	—	—	—	—	—	—	—
Local	145	1	—	1	—	1	10·79
In Action	—	—	—	—	—	—	—
POISONS	—	—	—	—	—	—	—
No appreciable disease	5	—	—	—	—	—	·17
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	3,226	11	1	12	43	63	141·00

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK, among the with the Ratios per 1,000 of the Strength, and the Average Ratios for 10 Years.

Ratio per 1,000.					Average Ratio per 1,000 from 1893 to 1902.				
Admissions.	Deaths.	Invalids sent to West Indies.	Invalids finally Discharged.	Constantly Sick.	Admissions.	Deaths.	Invalids sent to West Indies.	Invalids finally Discharged.	Constantly Sick.
—	—	—	—	—	·6	·07	—	—	·06
·9	—	—	·44	·01	5·6	—	—	—	·28
—	—	—	—	—	·2	—	—	—	·01
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	·2	·14	—	—	·01
1·3	—	—	—	·00	·7	—	—	·07	·06
—	—	—	—	—	—	—	—	—	—
4·0	—	—	—	·26	7·3	·50	·36	·07	·42
—	—	—	—	—	—	—	—	—	—
737·8	·44	4·85	2·64	17·42	778·7	4·28	6·63	1·36	21·01
—	—	—	—	—	·3	·07	—	—	·01
1·8	·88	·44	·44	·24	9·0	4·07	4·49	3·78	1·62
4·8	—	—	—	1·31	39·0	—	·07	—	3·57
26·9	·44	1·32	2·20	3·64	47·0	·07	5·49	3·21	4·67
117·7	—	·44	1·32	7·93	115·2	—	·43	—	6·38
—	—	—	—	—	—	—	—	—	—
12·8	—	—	—	·65	31·5	—	—	—	·91
—	—	—	—	—	·3	—	—	—	·02
—	—	—	—	—	·3	—	—	—	·01
39·7	—	·44	2·64	3·29	54·3	·07	2·21	2·28	3·39
4·8	—	·88	·88	·21	8·6	—	2·50	·78	·52
9·3	·44	·88	·88	·64	7·8	·21	·07	·14	·27
4·4	—	—	·88	·12	6·4	·43	·93	1·07	·59
2·6	—	·88	·88	·39	1·1	—	·43	·36	·18
23·4	—	—	·44	1·13	18·9	—	·50	·78	·93
1·3	—	—	—	·04	2·6	—	·36	·36	·19
15·9	·44	6·61	7·05	1·75	13·2	·86	3·85	2·85	·91
35·7	1·76	·88	1·76	2·31	61·6	1·78	1·93	1·21	2·35
44·1	—	·44	1·32	1·86	55·9	·71	1·14	1·78	1·83
29·5	—	·44	2·20	1·69	39·1	·07	·43	·43	2·93
1·3	—	·44	·88	·09	2·9	·71	1·00	·86	·31
61·7	·44	—	·44	3·61	74·1	—	1·35	1·50	4·93
10·6	—	—	—	·72	14·8	—	·85	·93	·74
45·8	—	—	—	1·61	45·2	·29	·14	·29	2·06
117·7	—	—	—	6·38	104·2	—	·50	·64	5·07
—	—	—	—	—	·4	·14	—	—	·02
63·9	·44	—	·44	4·76	67·9	·36	·36	1·78	3·47
—	—	—	—	—	—	—	1·43	·93	—
—	—	—	—	—	·4	·14	—	—	·02
2·2	—	—	—	·07	·9	—	—	—	·02
—	—	—	—	—	—	·07	—	—	—
1,421·8	5·29	18·95	27·77	62·14	1,616·2	15·06	37·46	27·47	70·38

ABSTRACT No. XIII.—TABLE showing the AVERAGE STRENTH, ADMISSIONS the TROOPS stationed in ST. HELENA, during the Year 1903, with the

Average Strength, 405. DISEASES.	Admission into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number sent Home.	Invalids. Number finally Discharged the Service.	Average Number constantly Sick.
GENERAL DISEASES.							
Small-pox	—	—	—	—	—	—	—
Other Eruptive Fevers	5	—	—	—	—	—	·83
Influenza	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—
Enteric Fever	—	—	—	—	—	—	—
Other Continued Fevers	—	—	—	—	—	—	—
Cholera	—	—	—	—	—	—	—
Dysentery	—	—	—	—	—	—	—
Yellow Fever	—	—	—	—	—	—	—
Malarial Fevers	—	—	—	—	—	—	—
Septic Diseases	—	—	—	—	—	—	—
Tubercular Diseases	1	—	—	—	1	1	·18
Syphilis, Primary	—	—	—	—	—	—	—
,, Secondary	4	—	—	—	1	1	·71
Gonorrhœa	32	—	—	—	—	—	2·51
Hydrophobia	—	—	—	—	—	—	—
Parasitic Diseases	7	—	—	—	—	—	·21
Scurvy	—	—	—	—	—	—	—
Alcoholism	3	—	—	—	—	—	·14
Rheumatism	11	—	—	—	1	1	·81
Debility	1	—	—	—	—	1	·06
Other General Diseases	4	—	—	—	—	—	·23
LOCAL DISEASES.							
Diseases of the—							
Nervous System { Nervous	4	—	—	—	2	2	·41
Nervous System { Mental	2	—	—	—	2	2	·33
Eye	7	—	—	—	—	—	·26
Other Organs of Special Sense	6	—	—	—	1	1	·60
Circulatory System	10	2	1	3	3	—	·69
Respiratory ,,	15	—	—	—	—	—	·64
Digestive ,,	57	—	—	—	—	1	2·96
Lymphatic ,,	4	—	—	—	—	—	·12
Urinary ,,	5	—	—	—	2	1	·40
Generative ,,	12	—	—	—	—	—	·47
Organs of Locomotion	8	—	—	—	1	2	·49
Connective Tissue	3	—	—	—	—	—	·12
Skin	29	—	—	—	—	—	1·78
INJURIES.							
General	—	—	—	—	—	—	—
Local	57	—	—	—	1	1	2·99
In Action	—	—	—	—	—	—	—
POISONS	—	—	—	—	—	—	—
No appreciable disease	2	—	—	—	—	—	·08
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	289	2	1	3	15	14	18·02

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK, among ratios per 1,000 of the Strength, and the Average Ratios for 10 Years.

Ratio per 1,000.					* Average Ratio per 1,000 for 1902.				
Admissions.	Deaths.	Invalids sent Home.	Invalids finally discharged.	Constantly Sick.	Admissions.	Deaths.	Invalids sent Home.	Invalids finally discharged.	Constantly Sick.
—	—	—	—	—	—	—	—	—	—
12·3	—	—	—	2·05	—	—	—	—	—
—	—	—	—	—	94·1	—	—	—	4·02
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	38·2	5·09	6·36	—	16·14
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	31·8	—	1·27	—	2·46
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
2·5	—	2·47	2·47	·44	—	—	—	—	—
—	—	—	—	—	3·8	—	—	—	·18
9·9	—	2·47	2·47	1·75	5·1	—	—	—	·78
79·0	—	—	—	6·20	62·3	—	—	—	3·83
—	—	—	—	—	—	—	—	—	—
17·3	—	—	—	·52	40·7	—	—	—	1·50
—	—	—	—	—	—	—	—	—	—
7·4	—	—	—	·35	5·1	—	—	—	·09
27·2	—	2·47	2·47	2·00	22·9	—	—	—	1·32
2·5	—	—	2·47	·15	12·7	—	1·27	1·27	·37
9·9	—	—	—	·57	—	—	—	1·27	—
9·9	—	4·94	4·94	1·01	10·2	1·27	3·82	5·09	·64
4·9	—	4·94	4·94	·81	—	—	—	—	—
17·3	—	—	—	·64	5·1	—	—	2·54	·17
14·8	—	2·47	2·47	1·48	3·8	—	1·27	1·27	·23
24·7	7·41	7·41	—	1·70	7·6	—	—	3·82	·56
37·0	—	—	—	1·58	33·1	—	—	—	1·60
140·7	—	—	2·47	7·31	128·5	—	2·54	2·54	3·09
9·9	—	—	—	·30	1·3	—	—	—	·11
12·3	—	4·94	2·47	·99	7·6	2·54	1·27	1·27	·85
29·6	—	—	—	1·17	17·8	—	—	—	1·28
19·8	—	2·47	4·94	1·21	14·0	—	1·27	5·09	1·11
7·4	—	—	—	·30	20·4	—	—	—	·71
71·6	—	—	—	4·40	38·2	—	—	—	2·15
—	—	—	—	—	1·3	—	—	—	·18
140·7	—	2·47	2·47	7·38	49·6	—	1·27	1·27	2·04
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	·01
4·9	—	—	—	·20	1·3	—	—	—	·04
—	—	—	—	—	—	—	—	—	—
713·6	7·41	37·04	34·57	44·49	656·5	8·91	20·36	25·45	45·46

† The average ratios for 10 years will be given in future years.

ABSTRACT No. XIV.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS the TROOPS stationed in the SOUTH AFRICAN COMMAND, during the year 1903,

Average Strength, 27,080. DISEASES.	Admissions into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number sent Home.	Invalids. Number finally Discharged the Service.	Average Number constantly Sick.
GENERAL DISEASES.							
Small-pox	—	—	—	—	—	—	—
Other Eruptive Fevers	167	3	—	3	—	—	22·11
Plague	—	1	—	1	—	—	—
Influenza	1,057	—	—	—	1	1	51·67
Diphtheria	10	2	—	2	..	—	·80
Enteric Fever	1,155	137	1	138	211	40	248·56
Other Continued Fevers	287	—	—	—	—	—	18·53
Cholera	—	—	—	—	—	—	—
Dysentery	658	22	1	23	26	1	57·45
Yellow Fever	—	—	—	—	—	—	—
Malarial Fevers	442	1	—	1	10	4	44·20
Septic Diseases	92	2	—	2	1	2	8·36
Tubercular Diseases	74	8	1	9	30	34	31·68
Syphilis, Primary	202	—	—	—	—	—	22·78
,, Secondary	447	—	—	—	28	13	59·30
Gonorrhœa	888	—	—	—	6	2	82·23
Hydrophobia	—	—	—	—	—	—	—
Parasitic Diseases	406	—	—	—	58	56	23·76
Scurvy	3	—	—	—	—	—	·25
Alcoholism	71	2	—	2	1	—	4·29
Rheumatism	629	2	—	2	32	22	60·92
Debility	432	—	—	—	39	13	38·97
Other General Diseases	113	1	—	1	8	3	8·09
LOCAL DISEASES.							
Diseases of the—							
Nervous System (Nervous)	254	7	1	8	45	48	20·08
Nervous System (Mental)	38	1	—	1	62	94	8·27
Eye	453	—	—	—	39	39	31·66
Other Organs of Special Sense	510	—	—	—	78	75	40·71
Circulatory System	428	9	1	10	118	115	49·84
Respiratory ,,	956	40	—	40	18	16	71·68
Digestive ,,	5,690	17	1	18	131	60	252·95
Lymphatic ,,	123	—	1	1	5	6	10·86
Urinary ,,	101	4	—	4	18	13	11·17
Generative ,,	740	—	—	—	6	5	62·12
Organs of Locomotion	532	—	—	—	35	25	42·66
Connective Tissue	735	—	—	—	1	1	36·86
Skin	1,351	—	—	—	6	4	69·47
INJURIES.							
General	65	12	—	12	—	1	3·28
Local	2,790	25	1	26	58	52	160·47
In Action	—	—	—	—	—	12	—
POISONS	20	2	—	2	—	2	·79
No appreciable disease	164	—	—	—	—	—	4·92
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	22,083	298	8	306	1,071	759*	1661·74

* Includes 3 men discharged in the Command.

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK among with the ratios per 1,000 of the Strength, and the Average Ratios for 10 Years.

Ratio per 1,000.					† Average Ratio per 1,000 for 1902.				
Admissions.	Deaths.	Invalids sent Home.	Invalids finally discharged.	Constantly Sick.	Admissions.	Deaths.	Invalids sent Home.	Invalids finally discharged.	Constantly Sick.
—	—	—	—	—	·0	—	—	—	·00
6·0	·11	—	—	·80	5·2	·05	—	—	·32
—	·04	—	—	—	—	—	—	—	—
38·2	—	·04	·04	1·87	12·0	·02	·11	—	·75
·4	·07	—	—	·03	·0	—	—	—	·00
41·7	4·99	7·62	1·45	8·98	17·5	2·09	5·58	·05	2·96
10·4	—	—	—	·67	7·1	·02	·11	—	·52
—	—	—	—	—	—	—	—	—	—
23·8	·83	·94	·04	2·08	16·1	·31	1·34	—	1·22
—	—	—	—	—	—	—	—	—	—
16·0	·04	·36	·14	1·60	31·8	·04	3·01	·02	1·99
3·3	·07	·04	·07	·30	1·5	·09	·02	—	·12
2·7	·33	1·08	1·23	1·14	1·7	·09	·58	·02	·27
7 3	—	—	—	·82	4·1	—	·11	—	·56
16·1	—	1·01	·47	2·14	8·8	·04	1·15	—	·99
32·1	—	·22	·67	2·97	21·9	—	·22	—	1·51
—	—	—	—	—	—	—	—	—	—
14·7	—	2·10	2·02	·86	7·2	—	·65	·05	·43
·1	—	—	—	·01	·1	-	—	—	·00
2·6	·07	·04	—	·15	2·2	·18	—	—	·13
22·7	·07	1·15	·79	2·20	15·4	·04	2·02	·05	1·45
15·6	—	1·41	·47	1·41	11·2	—	2·45	·02	·79
4·1	·04	·29	·11	·29	2·5	·07	·11	·02	·16
9·2	·29	1·63	1·73	·73	6·6	·14	1·17	·14	·69
1·4	·04	2·24	3·40	·30	1·9	·02	1·48	—	·27
16 4	—	1·41	1·41	1·14	9·0	—	1·01	—	·66
18·4	—	2·82	2·71	1·47	7·9	—	1·12	·18	·67
15·5	·36	4·26	4·15	1·80	11·6	·27	3·12	·34	1·07
34·5	1·45	·65	·58	2·59	24·9	1·50	1·66	·04	1·75
205·6	·65	4·73	2·17	9·14	103·3	·34	8·93	·76	5·11
4·4	·04	·18	·22	·39	3·8	—	·29	—	·26
3·6	·14	·65	·47	·40	2·4	·05	·49	·04	·17
26·7	—	·22	·18	2·24	14·9	—	·76	—	·95
19·2	—	1·26	·90	1·54	12·0	—	·85	·07	·81
26·6	—	·04	·04	1·33	14·7	—	·23	—	·69
48·8	—	·22	·14	2·51	21·9	—	·29	·02	1·18
2·3	·43	—	·C4	·12	1·4	·52	·05	—	·06
100·8	·94	2·10	1·88	5·80	50·5	·43	2·47	·14	2·82
—	—	—	·43	—	·0	—	—	·04	·00
·7	·07	—	·07	·03	·2	·09	—	—	·01
5·9	—	—	—	·18	3·0	—	—	—	·12
—	—	—	—	—	—	—	—	—	—
797·8	11·06	38·69	27·42*	60·03	456·6	6·41	41·38	2·00	31·46

† The average ratios for 10 years will be given in future years.

ABSTRACT No. XVIII.—TABLE showing the PREVALENCE and MORTALITY in SOUTH AFRICA, due to DYSENTERY, DIARRHŒA, and HEPATIC DISEASES (Congestion, Inflammation, and Abscess of Liver) in each Quarter of the Year, 1903.

—	Strength.	Dysentery.				Diarrhœa.				Hepatic Diseases.				Total.			
		Number.		Ratio per 1,000 of Strength.		Number.		Ratio per 1,000 of Strength.		Number.		Ratio per 1,000 of Strength.		Number.		Ratio per 1,000 of Strength.	
		Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
1st Quarter ..	33,274	279	14	8·4	·42	286	—	8·6	—	27	6	·8	·18	592	20	17·8	·60
2nd „ ..	29,205	145	5	5·0	·17	143	—	4·9	—	7	—	·2	—	295	5	10·1	·17
3rd „ ..	23,010	23	—	1·0	—	56	—	2·4	—	12	—	·5	—	91	—	3·9	—
4th „ ..	25,234	211	3	8·4	·12	284	—	11·3	—	7	2	·3	·08	502	5	19·9	·19
Total ..	27,680	658	22	23·8	·79	769	—	27·8	—	53	8	1·9	·29	1,480	30	53·5	1·08

ABSTRACT No. XIX.

ABSTRACT No. XIX.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS the Troops stationed at MAURITIUS during the Year 1903, with the

Diseases. (Average Strength, 746.)	Admissions into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number sent Home.	Invalids. Number finally Discharged the Service.	Average Number constantly Sick.
GENERAL DISEASES.							
Small-pox	—	—	—	—	—	—	—
Other Eruptive Fevers	—	—	—	—	—	—	—
Plague	1	—	—	—	—	—	·11
Influenza	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—
Enteric Fever	4	—	—	—	3	—	1·88
Other Continued Fevers	2	—	—	—	—	—	·42
Cholera	—	—	—	—	—	—	—
Dysentery	2	1	—	1	—	—	·19
Yellow Fever	—	—	—	—	—	—	—
Malarial Fevers	112	—	—	—	7	—	7·25
Septic Diseases	—	—	—	—	—	—	—
Tubercular Diseases	—	—	—	—	—	—	—
Syphilis, Primary	50	—	—	—	—	—	7·49
,, Secondary	44	—	—	—	—	—	4·56
Gonorrhœa	89	—	—	—	1	—	7·50
Hydrophobia	—	—	—	—	—	—	—
Parasitic Diseases	19	—	—	—	—	—	1·09
Scurvy	—	—	—	—	—	—	—
Alcoholism	2	—	—	—	—	—	·09
Rheumatism	10	—	—	—	—	—	·62
Debility	18	—	—	—	2	6	·80
Other General Diseases	1	1	—	1	—	—	·02
LOCAL DISEASES.							
Diseases of the—							
Nervous System { Nervous	5	—	—	—	—	—	·49
Nervous System { Mental	1	—	—	—	—	—	·12
Eye	10	—	—	—	—	—	·90
Other Organs of Special Sense	12	—	—	—	—	—	·73
Circulatory System	3	—	1	1	—	—	·29
Respiratory ,,	7	—	—	—	—	—	·20
Digestive ,,	47	—	—	—	1	—	2·48
Lymphatic ,,	7	—	—	—	—	—	1·02
Urinary ,,	4	—	1	1	1	—	·38
Generative ,,	82	—	—	—	—	—	8·36
Organs of Locomotion	14	—	—	—	—	—	·60
Connective Tissue	22	—	—	—	—	—	1·20
Skin	10	—	—	—	—	—	·73
INJURIES.							
General	—	—	—	—	—	—	—
Local	64	—	—	—	1	—	3·97
In Action	—	—	—	—	—	—	—
POISONS	—	—	—	—	—	—	—
No appreciable disease	1	—	—	—	—	—	·03
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	643	2	2	4	16	6	53·51

ABSTRACT No. XV.

ABSTRACT No. XV.—TABLE showing the PREVALENCE and MORTALITY of the DI COMMAND with the ratios p

Military Districts.	Pretoria.		Middelburg (T.).		Standerton.		Potchefstroom.		Bloemfontein.		Harrismith.	
Average Strength.	4,521		2,707		1,742		2,050		4,401		2,584	
Diseases.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
GENERAL DISEASES.												
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...
Other Eruptive Fevers	8	...	6	...	8	...	1	...	51	1	3	...
Plague	...	...	...	...	...	...	...	...	...	...	...	...
Influenza	325	...	18	...	38	...	45	...	149	...	139	...
Diptheria	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	302	31	60	2	47	4	160	21	158	16	54	8
Other Continued Fevers	6	...	40	...	...	...	113	...	57	...	14	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	149	6	51	3	31	2	71	1	138	3	14	...
Malarial Fevers	34	...	221	1	17	...	46	...	14	...	4	...
Septic Diseases	25	...	5	...	...	...	3	...	17	1	2	...
Tubercular Diseases	14	2	3	1	7	1	...	1	11	3	3	...
Syphillis, Primary	17	...	11	...	4	...	22	...	31	...	22	...
" Secondary	57	...	29	...	17	...	26	...	49	...	52	...
Gonorrhœa	73	...	29	...	52	...	41	...	179	...	26	...
Hydrophobia	...	...	...	...	...	...	...	...	...	...	...	...
Parasitic Diseases	102	...	18	...	34	...	17	...	44	...	35	...
Scurvy	...	...	...	...	2	...	1	...	...	...	...	...
Alcoholism	10	1	7	...	6	...	11	...	5	1	6	...
Rheumatism	90	...	26	...	35	...	42	...	113	...	76	...
Debility	53	...	44	...	65	...	25	...	56	...	57	...
Other General Diseases	16	...	4	...	13	...	15	...	17	1	9	...
LOCAL DISEASES.												
Diseases of the—												
Nervous System (Nervous)	38	2	12	...	12	1	29	2	21	1	20	...
Nervous System (Mental)	5	...	...	...	2	...	1	...	2	1	5	...
Eye	125	...	32	...	26	...	20	...	55	...	41	...
Other Organs of Special Sense	81	...	30	...	29	...	34	...	66	...	33	...
Circulatory System	116	4	14	...	13	1	29	1	53	1	27	...
Respiratory "	117	5	59	3	41	3	131	8	117	2	108	4
Digestive "	917	1	361	...	267	...	309	2	982	1	553	2
Lymphatic "	8	...	5	...	9	...	7	...	19	...	10	...
Urinary "	10	...	4	...	7	...	8	1	11	...	15	...
Generative "	86	...	14	...	34	...	17	...	72	...	39	...
Organs of Locomotion	98	...	31	...	40	...	36	...	73	...	64	...
Connective Tissue	111	...	80	..	34	—	42	...	98	...	47	...
Skin	166	...	99	...	120	...	151	...	184	...	195	...
INJURIES.												
General	8	2	1	...	9	1	1	...	18	5	3	1
Local	329	4	243	...	176	...	302	2	405	9	274	2
In Action	...	...	...	...	...	...	...	...	...	...	...	...
POISONS	2	...	...	...	2	1	2	...	3	...	4	...
Not yet diagnosed	...	...	...	...	...	...	...	...	...	...	...	...
No appreciable disease	32	...	21	...	7	...	17	...	21	...	15	...
General Total	3,530	58	1,578	10	1,204	14	1,775	39	3,289	46	1,969	17

CLASSES of DISEASES in each of the MILITARY DISTRICTS in the SOUTH AFRICA of Strength, during the year 1903.

Natal.		Manœuvres.		Pretoria.		Middelburg (T.).		Standerton.		Potchefstroom.		Bloemfontein.		Harrismith.		Cape Colony.		Natal.	
2,436		—		4,521		2,707		1,742		2,050		4,401		2,554		7,269		2,436	
				Ratio per 1,000 of Strength.															
Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	...	3	...	1·8	...	2·2	...	4·6	...	·5	...	11·6	·23	1·2	...	10·9	·27	3·3	...
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	·41
23		38		71·9	...	6·6	...	21·8	...	22·0	...	33·9	...	54·4	...	38·8	...	9·4	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·4	·27	...	
91	21	5		66·8	6·86	22·2	·74	27·0	2·30	78·0	10·24	35·9	3·64	21·1	3·13	38·2	4·68	37·4	8·62
10				1·3	...	14·8	...	...	...	55·1	...	12·9	...	5·5	...	6·5	...	4·1	
...		...		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
54		3		33·0	1·33	18·8	1·11	17·8	1·15	34·6	·49	31·4	·68	5·5	...	20·2	·83	22·2	·41
32		7		7·5	...	81·6	·37	9·8	...	22·4	...	3·2	...	1·6	...	9·2	...	13·1	
6		2		5·5	...	1·8	...	...	...	1·5	...	3·9	·23	·8	...	4·4	...	2·5	·41
5		2		3·1	·44	1·1	·37	4·2	·57	...	·49	2·5	·68	1·2	...	4·0	...	2·1	
34		1		3·8	...	4·1	...	2·3	...	10·7	...	7·0	...	8·6	...	8·3	...	14·0	
27	...	9	...	12·6	...	10·7	...	9·8	...	12·7	...	11·1	...	20·4	...	24·8	...	11·1	
139	...	17	...	16·1	...	10·7	...	29·9	...	20·0	...	40·7	...	10·2	...	45·7	...	57·1	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
22	...	6	...	22·6	...	6·6	...	19·5	...	8·3	...	10·0	...	13·7	...	17·6	...	9·0	...
...	...	...	...	...	...	...	...	1·1	...	·5	...	...	...	...	...	...	...	...	...
11	...	3	...	2·2	·22	2·6	...	3·4	...	5·4	...	1·1	·23	2·3	...	1·6	...	4·5	...
36	...	36	...	19·9	...	9·6	...	20·1	...	20·5	...	25·7	...	29·8	...	24·1	·27	14·8	...
37	...	3	...	11·7	...	16·3	...	37·3	...	12·2	...	12·7	...	22·3	...	12·7	...	15·2	...
3				3·5	...	1·5	...	7·5	...	7·3	...	3·9	·23	3·5	...	4·9	...	1·2	...
48		9		8·4	·44	4·4	...	6·9	·57	14·1	·98	4·8	·23	7·8	...	8·9	·14	19·7	...
6				1·1	...	...	...	1·1	...	·5	...	·5	·23	2·0	...	2·3	...	2·5	...
27		4		27·6	...	11·8	...	14·9	...	9·8	...	12·5	...	16·1	...	16·9	...	11·1	...
33		8		17·9	...	11·1	...	16·6	...	16·6	...	15·0	...	12·9	...	27·0	...	13·5	...
40	1	6	...	25·7	·88	5·2	...	7·5	·57	14·1	·49	12·0	·23	10·6	...	17·9	·14	16·4	·41
71	2	43	2	25·9	1·11	21·8	1·11	23·5	1·72	63·9	3·90	26·6	·45	42·3	1·57	37·0	·51	29·1	·82
446	5	128		202·8	·22	133·4	...	153·3	...	150·7	·98	223·1	·23	216·5	·78	237·6	·83	183·1	2·05
23	...	3		1·8	...	1·8	...	5·2	...	3·4	...	4·3	...	3·9	...	5·4	...	9·4	...
5	...	1		2·2	...	1·5	...	4·0	...	3·9	·49	2·5	...	5·9	...	5·5	·41	2·1	...
81	...	17	...	19·0	...	5·2	...	19·5	...	8·3	...	16·4	...	15·3	...	52·3	...	33·3	...
22	...	24	...	21·7	...	11·5	...	23·0	...	17·6	...	16·6	...	25·1	...	19·8	...	9·0	...
57	...	18	...	24·6	...	29 6	...	19·5	...	20·5	...	22·3	...	18·4	...	34·1	...	23·4	...
103	...	30	...	36·7	...	36·6	...	68·9	...	73·7	...	41·8	...	76·4	...	41·7	...	42·3	...
4	...	2	...	1·8	·44	·4	...	5·2	·57	·5	...	4·1	1·14	1·2	·39	2·6	·41	1·6	...
306	3	104	...	72·8	·88	89·8	...	101·0	...	147·3	·98	92·0	2·04	107·3	·78	89·6	·69	125·6	1·23
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1	...	...	...	·4	...	...	...	1·1	·57	1·0	...	·7	...	1·6	...	·8	·14	·4	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	...	...	...	7·1	...	7·8	...	4·0	...	8·3	...	4·8	...	5·9	...	5·9	...	3·3	...
1,819	35	532	2	780·8	12·83	582·9	3·69	691·2	8·04	865·9	19·02	747·3	10·45	770·9	6·66	878·7	10·59	746·7	14·37

ABSTRACT No. XVI.—TABLE, taken from the Report of the Principal Medical Officer, showing the STATIONS in SOUTH AFRICA at which the ADMISSIONS and DEATHS from ENTERIC FEVER took place in each of the four Quarters of the Year 1903.

Districts.	Stations.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.		Total.	
		Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
Pretoria	Pretoria ..	87	13	49	3	7	1	123	10	266	27
	Krugersdorp..	13	—	6	—	—	—	—	—	19	—
	Pietersburg ..	16	4	1	—	—	—	—	—	17	4
Middelburg (Transvaal)	Middelburg (Transvaal)	17	1	7	—	—	—	3	—	27	1
	Machadadorp	27	—	—	—	—	—	—	—	27	—
	Barberton ..	—	—	1	—	—	—	5	1	6	1
Standerton ..	Standerton ..	35	1	9	1	1	1	2	1	47	4
Potchefstroom	Potchefstroom	104	14	50	6	2	—	4	1	160	21
Bloemfontein	Bloemfontein	39	1	7	—	1	—	31	1	78	2
	Kroonstad ..	28	8	4	2	1	—	46	3	79	13
	Ladybrand ..	—	—	1	—	—	1	—	—	1	1
Harrismith ..	Harrismith ..	37	4	11	4	—	—	6	—	54	8
Cape Colony	Kimberley ..	—	—	1	—	—	—	—	—	1	—
	Naauwpoort ..	3	—	3	—	—	—	—	—	6	—
	Burghersdorp	6	2	2	—	—	—	—	—	8	2
	Middelburg (Cape Colony)	64	8	30	8	—	—	1	—	95	16
	Wynberg ..	120	11	38	4	2	1	2	—	162	16
	Deelfontein ..	3	—	—	—	—	—	—	—	3	—
	Woodstock ..	3	—	—	—	—	—	—	—	3	—
Natal ..	Vryheid ..	5	2	—	—	—	—	—	—	5	2
	Newcastle ..	10	4	—	—	—	—	—	—	10	4
	Maritzburg ..	15	6	4	1	—	—	14	1	33	8
	Mooi River ..	16	2	8	3	—	—	8	—	32	5
	Ladysmith ..	—	—	2	—	7	2	—	—	9	2
	Howick ..	1	—	—	—	—	—	—	—	1	—
	Umbilo ..	1	—	—	—	—	—	—	—	1	—
Manœuvres ..	Troops on Manœuvres	—	—	—	—	5	—	—	—	5	—
	Total ..	650	81	234	32	26	6	245	18	1155	137

ABSTRACT No. XVII.—TABLE showing the PREVALENCE of DYSENTERY, DIARRHŒA and HEPATIC DISEASES (CONGESTION, INFLAMMATION and ABCESS of LIVER) in each of the DISTRICTS in SOUTH AFRICA, during the Year, 1903.

Military Districts.	Strength.	Dysentry.				Diarrhœa.				Hepatic Diseases.				Total.			
		Number.		Ratio per 1,000 of Strength.		Number.		Ratio per 1,000 of Strength.		Number.		Ratio per 1,000 of Strength.		Number.		Ratio per 1,000 of Strength.	
		Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
Pretoria	4,521	149	6	33·0	1·33	110	—	24·3	—	8	—	1·8	—	267	6	59·1	1·33
Middelburg, T. ..	2,707	51	3	18·8	1·11	122	—	45·1	—	4	—	1·5	—	177	3	65·4	1·11
Standerton ..	1,742	31	2	17·8	1·15	57	—	32·7	—	2	—	1·2	—	90	2	51·7	1·15
Potchefstroom ..	2,050	71	1	34·6	·49	30	—	14·6	—	3	2	1·5	·98	104	3	50·7	1·46
Bloemfontein ..	4,401	128	3	31·4	·68	183	—	41·6	—	14	—	3·2	—	335	3	76·1	·68
Harrismith ..	2,554	4	—	5·5	—	60	—	23·5	—	3	1	1·2	·39	77	1	30·1	·39
Cape Colony ..	7,269	147	6	20·2	·83	151	—	20·8	—	9	3	1·2	·41	307	9	42·2	1·24
Natal	2,436	54	1	22·2	·41	49	—	20·1	—	8	2	3·3	·82	111	3	45·6	1·23
Manœuvres .	—	3	—	—	—	7	—	—	—	2	—	—	—	12	—	—	—
Total ..	27,080	658	22	23·8	·79	769	—	27·8	—	53	8	1·9	·29	1,480	30	53·5	1·08

ABSTRACT No. XIV.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS the TROOPS stationed in the SOUTH AFRICAN COMMAND, during the year 1903,

Average Strength, 27,680. DISEASES.	Admissions into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number sent Home.	Invalids. Number finally Discharged the Service.	Average Number constantly Sick.
GENERAL DISEASES.							
Small-pox	—	—	—	—	—	—	—
Other Eruptive Fevers	167	3	—	3	—	—	22·11
Plague	—	1	—	1	—	—	—
Influenza	1,057	—	—	—	1	1	51·67
Diphtheria	10	2	—	2	—	—	·80
Enteric Fever	1,155	137	1	138	211	40	248·56
Other Continued Fevers	287	—	—	—	—	—	18·53
Cholera	—	—	—	—	—	—	—
Dysentery	658	22	1	23	26	1	57·45
Yellow Fever	—	—	—	—	—	—	—
Malarial Fevers	442	1	—	1	10	4	44·20
Septic Diseases	92	2	—	2	1	2	8·36
Tubercular Diseases	74	8	1	9	30	34	31·68
Syphilis, Primary	202	—	—	—	—	—	22·78
,, Secondary	447	—	—	—	28	13	59·30
Gonorrhœa	888	—	—	—	6	2	82·23
Hydrophobia	—	—	—	—	—	—	—
Parasitic Diseases	406	—	—	—	58	56	23·76
Scurvy	3	—	—	—	—	—	·25
Alcoholism	71	2	—	2	1	—	4·29
Rheumatism	629	2	—	2	32	22	60·92
Debility	432	—	—	—	39	13	38·97
Other General Diseases	113	1	—	1	8	3	8·09
LOCAL DISEASES.							
Diseases of the—							
Nervous System (Nervous)	254	7	1	8	45	48	20·08
Nervous System (Mental)	38	1	—	1	62	94	8·27
Eye	453	—	—	—	39	39	31·66
Other Organs of Special Sense	510	—	—	—	78	75	40·71
Circulatory System	428	9	1	10	118	115	49·84
Respiratory ,,	956	40	—	40	18	16	71·68
Digestive ,,	5,690	17	1	18	131	60	252·95
Lymphatic ,,	123	—	1	1	5	6	10·86
Urinary ,,	101	4	—	4	18	13	11·17
Generative ,,	740	—	—	—	6	5	62·12
Organs of Locomotion	532	—	—	—	35	25	42·66
Connective Tissue	735	—	—	—	1	1	36·86
Skin	1,351	—	—	—	6	4	69·47
INJURIES.							
General	65	12	—	12	—	1	3·28
Local	2,790	25	1	26	58	52	160·47
In Action	—	—	—	—	—	12	—
POISONS	20	2	—	2	—	2	·79
No appreciable disease	164	—	—	—	—	—	4·92
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	22,083	298	8	306	1,071	759*	1661·74

* Includes 3 men discharged in the Command.

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK among with the ratios per 1,000 of the Strength, and the Average Ratios for 10 Years.

	Ratio per 1,000.					† Average Ratio per 1,000 for 1902.				
	Admissions.	Deaths.	Invalids sent Home.	Invalids finally discharged.	Constantly Sick.	Admissions.	Deaths.	Invalids sent Home.	Invalids finally discharged.	Constantly Sick.
	—	—	—	—	—	·0	—	—	—	·00
	6·0	·11	—	—	·80	5·2	·05	—	—	·22
	—	·04	—	—	—	—	—	—	—	—
	38·2	—	·04	·04	1·87	12·0	·02	·11	—	·75
	·4	·07	—	—	·03	·0	—	—	—	·00
	41·7	4·99	7·62	1·45	8·98	17·5	2·09	5·58	·05	2·96
	10·4	—	—	—	·67	7·1	·02	·11	—	·52
	—	—	—	—	—	—	—	—	—	—
	23·8	·83	·94	·04	2·08	16·1	·31	1·34	—	1·22
	—	—	—	—	—	—	—	—	—	—
	16·0	·04	·36	·14	1·60	31·8	·04	3·01	·02	1·99
	3·3	·07	·04	·07	·30	1·5	·09	·02	—	·12
	2·7	·33	1·06	1·23	1·14	1·7	·09	·58	·02	·27
	7 3	—	—	—	·82	4·4	—	·11	—	·56
	16·1	—	1·01	·47	2·14	8·8	·04	1·15	—	·99
	32·1	—	·22	·07	2·97	21·9	—	·22	—	1·51
	—	—	—	—	—	—	—	—	—	—
	14·7	—	2·10	2·02	·86	7·2	—	·65	·05	·43
	·1	—	—	—	·01	·1	-	—	—	·00
	2·6	·07	·04	—	·15	2·2	·18	—	—	·13
	22·7	·07	1·15	·79	2·20	15·4	·04	2·02	·05	1·45
	15·6	—	1·41	·47	1·41	11·2	—	2·45	·02	·79
	4·1	·04	·29	·11	·29	2·5	·07	·11	·02	·16
	9·2	·29	1·63	1·73	·73	6·6	·14	1·17	·14	·69
	1·4	·04	2·24	3·40	·30	1·9	·02	1·48	—	·27
	16 4	—	1·41	1·41	1·14	9·0	—	1·01	—	·66
	18·4	—	2·82	2·71	1·47	7·9	—	1·12	·18	·67
	15·5	·36	4·26	4·15	1·80	11·6	·27	3·12	·34	1·07
	34·5	1·45	·65	·58	2·59	24·9	1·50	1·66	·04	1·75
	205·6	·65	4·73	2·17	9·14	103·3	·34	8·93	·76	5·11
	4·4	·04	·18	·22	·39	3·8	—	·29	—	·26
	3·6	·14	·65	·47	·40	2·4	·05	·49	·04	·17
	26·7	—	·22	·18	2·24	14·9	—	·76	—	·95
	19·2	—	1·26	·90	1·54	12·0	—	·85	·07	·81
	28·6	—	·04	·04	1·33	14·7	—	·23	—	·69
	48·8	—	·22	·14	2·51	21·9	—	·29	·02	1·18
	2·3	·43	—	·04	·12	1·4	·52	·05	—	·06
	109·8	·94	2·10	1·88	5·80	50·5	·43	2·47	·14	2·82
	—	—	—	·43	—	·0	—	—	·04	·00
	·7	·07	—	·07	·03	·2	·09	—	—	·01
	5·9	—	—	—	·18	3·0	—	—	—	·12
	—	—	—	—	—	—	—	—	—	—
	797·8	11·06	38·69	27·42*	60·03	456·6	6·41	41·38	2·00	31·46

† The average ratios for 10 years will be given in future years.

ABSTRACT No. XIVA.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK among the TROOPS stationed in CAPE COLONY during the year 1903, with the ratios per 1,000 of the Strength, and the Average Ratios for 10 years.

Average Strength, 7,269. Diseases.	Admissions into Hospital.	Deaths in the Command.	Invalids sent Home.	Average number constantly sick.	Ratio per 1,000. Admissions.	Deaths.	Invalids sent Home.	Constantly Sick.	*Average Ratio per 1,000 for 1902. Admissions.	Deaths.	Invalids sent Home.	Constantly sick.
GENERAL DISEASES.												
Small-pox	—	—	—	—	—	—	—	—	·4	—	—	·04
Other Eruptive Fevers	79	2	—	10·56	10·9	·27	—	1·45	3·0	—	—	·23
Influenza	282	—	1	13·25	38·8	—	·14	1·82	25·8	—	·76	1·72
Diphtheria	10	2	—	·80	1·4	·27	—	·11	—	—	—	—
Enteric Fever	278	34	52	66·70	38·2	4·68	7·15	9·18	14·0	2·84	4·93	2·49
Other Continued Fevers	47	—	—	3·09	6·5	—	—	·43	4·4	—	·19	·44
Cholera	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery	147	6	3	12·95	20·2	·83	·41	1·78	16·1	—	2·65	1·25
Yellow Fever	—	—	—	—	—	—	—	—	—	—	—	—
Malarial Fevers	67	—	—	3·69	9·2	—	—	·51	17·8	—	3·41	1·14
Septic Diseases	32	—	—	2·46	4·4	—	—	·34	5·5	·19	.19	·55
Tubercular Diseases	29	—	10	7·08	4·0	—	1·38	·97	2·5	·19	1·33	·41
Syphilis, Primary	60	—	—	8·57	8·3	—	—	1·18	15·7	—	·57	2·13
,, Secondary	181	—	9	23·63	24·9	—	1·24	3·25	20·8	—	·95	2·71
Gonorrhœa	332	—	4	30·57	45·7	—	·55	4·21	64·2	—	·57	4·25
Hydrophobia	—	—	—	—	—	—	—	—	—	—	—	—
Parasitic Diseases	128	—	8	6·71	17·6	—	1·10	·92	14·2	...	·19	1·29
Scurvy	—	—	—	—	—	—	—	—	—	—	—	—
Alcoholism	12	—	—	·64	1·6	—	—	·09	8·7	·57	—	·43
Rheumatism	175	2	10	15·75	24·1	·27	1·38	2·17	33·2	—	4·74	4·55
Debility	92	—	3	8·11	12·7	—	·41	1·12	24·6	—	6·63	2·04
Other General Diseases	36	—	4	3·00	4·9	—	·55	·41	4·2	·19	—	·69
LOCAL DISEASES.												
Diseases of the—												
Nervous System { Nervous	65	1	14	5·19	8·9	·14	1·93	·71	16·1	·76	2·46	1·67
Nervous System { Mental	17	—	33	3·21	2·3	—	4·54	·44	8·1	—	9·85	·62
Eye	123	—	15	9·02	16·9	—	2·06	1·24	13·5	—	1·70	1·89
Other Organs of Special Sense	196	—	44	18·95	27·0	—	6·05	2·61	14·2	—	1·89	1·10
Circulatory System	130	1	35	13·78	17·9	·14	4·81	1·90	15·0	·38	3·79	1·16
Respiratory ,,	269	11	3	17·41	37·0	1·51	·41	2·39	62·7	3·79	5·11	5·84
Digestive ,,	1727	6	72	75·28	237·6	·83	9·91	10·36	194·5	·57	25·00	11·53
Lymphatic ,,	39	—	2	4·68	5·4	—	·27	·64	7·0	—	1·33	·52
Urinary ,,	40	3	8	4·74	5·5	·41	1·10	·65	5·1	·19	·57	·45
Generative ,,	380	—	2	33·27	52·3	—	·27	4·58	36·2	—	1·33	3·08
Organs of Locomotion	144	—	10	12·22	19·8	—	1·38	1·68	19·1	—	·19	2·13
Connective Tissue	248	—	1	14·48	34·1	—	·14	1·99	22·7	—	·38	1·77
Skin	303	—	2	15·79	41·7	—	·27	2·17	40·7	—	·95	2·85
INJURIES.												
General	19	3	—	1·15	2·6	·41	—	·16	4·5	1·14	·38	·15
Local	651	5	14	40·53	89·6	·69	1·93	5·56	101·0	·38	4·93	8·74
In Action	—	—	—	—	—	—	—	—	—	—	—	—
POISONS	6	1	—	·40	·8	·14	—	·05	—	·19	—	—
No appreciable disease	43	—	—	1·84	5·9	—	—	·25	2·3	—	—	·07
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—	—	—	—	—	—
General Total	6387	77	359	489·50	878·7	10·59	49·39	67·34	837 8	11·37	86·95	69·93

* The average ratio for 10 years will be given in future years.

ABSTRACT No. XIVB.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK, among the TROOPS stationed in NATAL during the year 1903, with the ratios per 1,000 of the Strength, and the Average Ratios for 10 years.

Average Strength, 2,436. Diseases.	Admissions into Hospital.	Deaths in the Command.	Invalids sent Home.	Average number constantly sick.	Ratio per 1,000. Admissions.	Deaths.	Invalids sent Home.	Constantly Sick.	*Average Ratio per 1,000 for 1902. Admissions.	Deaths.	Invalids sent Home.	Constantly Sick.
GENERAL DISEASES.												
Small-pox	—	—	—	—	—	—	—	—	—	—	—	—
Other Eruptive Fevers	8	—	—	1·81	3·3	—	—	·74	45·2	·63	—	2·59
Plague	—	1	—	—	—	·41	—	—	—	—	—	—
Influenza	25	—	—	1·14	10·3	—	—	·47	3·3	—	—	·09
Diphtheria	—	—	—	—	—	—	—	—	·4	—	—	·05
Enteric Fever	93	21	64	29·94	38·2	8·62	26·27	12·29	47·1	4·59	44·83	8·37
Other Continued Fevers	10	—	—	·63	4·1	—	—	·26	5·8	—	1·04	·29
Cholera	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery	54	1	7	4·01	22·2	·41	2·87	1·65	25·6	·63	7·71	1·72
Yellow Fever	—	—	—	—	—	—	—	—	—	—	—	—
Malarial Fevers	33	—	·5	2·86	13·5	—	2·05	1·17	68·4	—	26·69	5·14
Septic Diseases	6	1	—	·64	2·5	·41	—	·26	1·9	·42	—	·05
Tubercular Diseases	5	—	2	3·23	2·1	—	·82	1·33	4·0	—	2·92	·87
Syphilis, Primary	35	—	—	2·53	14·4	—	—	1·04	5·2	—	—	·65
" Secondary	28	—	1	3·14	11·5	—	·41	1·29	14·6	—	6·88	1·14
Gonorrhœa	145	—	—	11·85	59·5	—	—	4·86	37·5	—	·63	2·10
Hydrophobia	—	—	—	—	—	—	—	—	—	—	—	—
Parasitic Diseases	23	—	—	1·53	9·5	—	—	·63	6·5	—	4·80	·46
Scurvy	—	—	—	—	—	—	—	—	·2	—	—	·01
Alcoholism	13	—	—	·76	5·3	—	—	·31	5·4	—	—	·19
Rheumatism	39	—	7	3·48	16·0	—	2·87	1·43	20·2	—	8·55	1·77
Debility	37	—	9	4·10	15·2	—	3·69	1·68	19·0	—	9·59	1·64
Other General Diseases	3	—	—	·39	1·2	—	—	·16	2·7	—	·21	·15
LOCAL DISEASES.												
Diseases of the—												
Nervous System { Nervous	49	—	5	2·09	20·1	—	2·05	·86	6·3	·21	5·21	·63
Nervous System { Mental	6	—	14	2·49	2·5	—	5·75	1·02	2·1	—	1·88	1·04
Eye	28	—	1	1·46	11·5	—	·41	·60	14·2	—	3·34	1·19
Other Organs of Special Sense	34	—	7	1·82	14·0	—	2·87	·75	16·7	—	6·05	1·11
Circulatory System	44	1	12	5·10	18·1	·41	4·93	2·09	16·1	1·04	16·26	2·08
Respiratory "	80	2	4	4·89	32·8	·82	1·64	2·01	29·8	1·46	6·88	2·50
Digestive "	466	5	7	22·31	191·3	2·05	2·87	9·16	151·2	·63	39·20	11·17
Lymphatic "	24	—	1	2·41	9·8	—	·41	·99	7·1	—	1·04	·56
Urinary "	5	—	—	·15	2·1	—	—	·06	1·5	—	1·88	·30
Generative "	81	—	1	5·45	33·2	—	·41	2·24	22·1	—	3·34	2·68
Organs of Locomotion	23	—	5	3·26	9·5	—	2·05	1·34	12·1	—	3·96	1·52
Connective Tissue	64	—	—	2·63	26·3	—	—	1·08	25·9	—	1·67	1·24
Skin	113	—	—	6·59	46·4	—	—	2·71	28·4	—	1·04	2·67
INJURIES.												
General	4	—	—	·10	1·6	—	—	·04	·8	1·04	·21	·14
Local	322	3	10	20·23	132·2	1·23	4·11	8·30	89·2	·83	11·47	5·35
In Action	—	—	—	—	—	—	—	—	·4	—	—	·01
POISONS	1	—	—	·01	·4	—	—	·00	·8	·63	—	·13
No appreciable disease	8	—	—	·26	3·3	—	—	·11	7·1	—	—	·55
Cause unknown (refers to death only)	—	—	—	—	—	—	—	—	—	—	—	—
General Total	*1,909*	35	162	153·29	783·7	14·37	66·50	62·93	744·8	12·09	217·26	62·

* The average ratios for 10 years will be given in future years.

ABSTRACT No. XXIII.—TABLE showing the AVERAGE STRENGTH, ADMIS- among the TROOPS stationed in INDIA during the year 1903, with the

Average Strength, 69,612. Diseases.	Admissions into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number sent home.	Invalids. Number finally discharged the service.	Average Number constantly Sick.
GENERAL DISEASES.							
Small-pox	68	8	—	8	—	—	8·24
Other Eruptive Fevers	254	3	—	3	—	—	12·49
Plague	12	2	—	2	—	—	1·49
Influenza	192	—	—	—	—	—	8·25
Diphtheria	—	—	—	—	—	—	—
Enteric Fever	1,266	291	1	292	46	8	293·68
Other Continued Fevers	1,206	1	—	1	6	1	59·24
Cholera	79	56	—	56	—	—	1·83
Dysentery	1,133	41	1	42	59	2	93·59
Yellow Fever	—	—	—	—	—	—	—
Malarial Fevers	17,037	31	4	35	244	23	571·47
Septic Diseases	73	5	2	7	—	1	4·61
Tubercular Diseases	265	23	4	27	101	66	56·56
Syphilis, Primary	2,334	—	—	—	1	—	221·05
,, Secondary	3,248	10	2	12	190	71	350·66
Gonorrhœa	7,456	—	—	—	21	6	578·72
Hydrophobia	1	1	—	1	—	—	·06
Parasitic Diseases	1,263	1	—	1	159	138	83·50
Scurvy	5	—	—	—	—	—	·55
Alcoholism	169	4	—	4	1	—	7·36
Rheumatism	1,105	2	1	3	53	12	75·00
Debility	1,563	2	—	2	213	43	110·10
Other General Diseases	462	16	4	20	14	5	29·89
LOCAL DISEASES.							
Diseases of the—							
Nervous System { Nervous	584	18	1	19	93	70	36·05
Nervous System { Mental	101	2	—	2	78	87	25·74
Eye	708	—	—	—	52	35	44·67
Other Organs of Special Sense	1,105	1	—	1	67	38	58·89
Circulatory System	1,113	54	3	57	258	159	108·84
Respiratory ,,	1,754	54	2	56	28	13	108·65
Digestive ,,	6,881	127	4	131	179	35	316·75
Lymphatic ,,	1,406	—	1	1	12	3	180·51
Urinary ,,	174	14	1	15	23	10	14·52
Generative ,,	5,274	1	—	1	12	7	461·28
Organs of Locomotion	1,015	1	1	2	65	42	60·92
Connective Tissue	1,641	1	—	1	4	—	71·77
Skin	3,761	—	—	—	6	2	169·14
INJURIES.							
General	321	74	—	74	12	2	17·39
Local	6,402	46	—	46	62	30	258·70
In Action	—	—	—	—	—	—	—
POISONS	138	6	—	6	3	—	6·01
No appreciable disease	210	—	—	—	—	—	9·77
Details not available	—	—	—	—	—	—	—
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	72,081	896	32	928	2,062	909	4,397·17

SIONS into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK Ratios per 1,000 of the Strength, and the Average Ratios for 10 Years.

Ratio per 1,000.					Average Ratio per 1,000 from 1893 to 1902.				
Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.	Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
1·0	·11	—	—	·12	·5	·05	—	—	·04
5·1	·04	—	—	·18	1·6	·01	·00	—	·08
·2	·03	—	—	·02	·0	·01	·00	—	·01
2·8	—	—	—	·12	6·1	·03	·00	·00	·26
—	—	—	—	—	·0	·01	·00	—	·00
19·6	4·19	·63	·11	2·93	22·5	5·94	·62	·02	3·25
18·3	·01	·09	·01	·35	28·2	·03	·05	·01	1·33
1·1	·30	—	—	·03	·9	·89	·00	—	·02
16·3	·30	·35	·03	1·34	26·3	·30	1·11	·13	1·87
—	—	—	—	—	—	—	—	—	—
244·7	·50	3·51	·33	8·21	331·7	·68	3·32	·47	12·05
1·1	·10	—	·01	·07	1·3	·10	·01	·01	·09
3·8	·39	1·45	·95	·84	4·3	·33	1·69	1·15	·74
33·5	—	·01	—	3·32	104·4	·00	·05	·01	9·60
46·7	·17	2·73	1·02	5·04	76·3	·23	5·86	2·07	8·01
107·1	—	·20	·09	8·31	159·5	·00	·37	·14	12·33
·0	·01	—	—	·00	·0	·04	—	—	·00
18·1	·01	2·28	1·98	1·20	10·6	·00	·01	·00	·40
·1	—	—	—	·01	·3	·00	·01	·00	·02
2·4	·06	·01	—	·11	4·1	·09	·03	·01	·15
15·9	·04	·76	·17	1·08	26·3	·03	·98	·38	1·96
22·5	·03	3·06	·62	1·58	21·2	·02	3·23	·78	1·48
6·6	·29	·20	·07	·43	7·4	·16	·53	·15	·54
3·4	·27	1·34	1·01	·52	7·5	·31	1·12	·85	·56
1·5	·03	1·12	1·25	·37	1·4	·03	1·22	1·38	·41
10·2	—	·75	·50	·64	10·3	—	·56	·39	·69
18·9	·01	·96	·55	·80	14·6	·01	1·01	·72	·82
16·0	·62	3·71	2·20	1·57	11·2	·58	3·28	2·49	1·15
25·2	·80	·40	·19	1·56	29·7	·82	·55	·22	1·70
26·8	1·38	2·57	·50	4·55	111·9	1·89	2·27	·59	5·09
20·2	·01	·17	·04	2·16	27·8	·02	·31	·11	3·23
2·5	·22	·23	·14	·21	2·1	·19	·34	·19	·21
75·3	·01	·17	·10	6·63	85·0	·01	·23	·11	6·61
14·6	·03	·23	·60	·88	10·9	·03	·92	·57	·80
23·6	·01	·03	—	1·03	22·4	·01	·10	·04	1·09
54·0	—	·09	·03	2·29	54·5	·00	·15	·06	2·40
4·6	1·06	·17	·03	·25	3·7	1·19	·12	·08	·19
92·0	·66	·66	·43	3·72	96·5	·66	·95	·56	4·48
—	—	—	—	—	·0	·00	—	·13	·00
2·0	·09	·04	—	·09	·9	·11	·09	·00	·03
3·0	—	—	—	·14	2·3	—	—	—	·11
—	—	—	—	—	—	—	—	—	·24
—	—	—	—	—	—	·00	—	—	—
1,085·5	13·23	29·62	13·06	63·17	1,327·1	15·61	31·62	13·81	84·04

ABSTRACT No. XXIV.—TABLE showing the PREVALENCE and MORTALITY INDIA with the ratios per 1,000 of Strength, during the year 1903.

Military Districts.	Presidency.		Allahabad.		Oudh.		Rohilkhand.		Narbudda.	
Average Strength.	2,883		1,563		5,268		3,610		1,094	
Diseases.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
GENERAL DISEASES.										
Small-pox	1	—	4	—	26	5	4	—	—	—
Other Eruptive Fevers	3	—	—	—	3	—	11	2	—	—
Plague	—	—	—	—	—	—	—	—	—	—
Influenza	44	—	—	—	12	—	43	—	12	—
Diphtheria	—	—	—	—	—	—	—	—	—	—
Enteric Fever	19	4	38	13	139	20	58	5	36	5
Other Continued Fevers	36	—	47	—	272	—	62	—	69	—
Cholera	8	5	2	1	1	—	25	17	—	—
Dysentery	86	2	24	1	99	3	61	3	29	—
Yellow Fever	—	—	—	—	—	—	—	—	—	—
Malarial Fevers	512	1	415	2	608	—	359	—	314	—
Septic Diseases	2	—	2	—	2	1	4	1	2	—
Tubercular Diseases	4	1	3	—	9	2	16	1	5	1
Syphilis, Primary	48	—	22	—	154	—	131	—	18	—
,, Secondary	191	1	58	1	133	2	136	1	51	—
Gonorrhœa	414	—	223	—	664	—	390	—	104	—
Hydrophobia	—	—	—	—	—	—	—	—	—	—
Parasitic Diseases	81	—	58	—	56	—	29	—	12	—
Scurvy	—	—	—	—	1	—	—	—	—	—
Alcoholism	14	—	1	—	11	1	4	—	4	—
Rheumatism	40	—	29	1	57	—	56	—	23	—
Debility	52	1	32	—	86	1	64	—	42	—
Other General Diseases	6	2	19	1	47	1	37	—	6	1
LOCAL DISEASES.										
Diseases of the—										
Nervous System { Nervous Diseases	18	2	6	—	26	2	54	—	4	1
Nervous System { Mental ,,	3	—	4	—	5	—	—	—	3	—
Eye	32	—	19	—	55	—	42	—	11	—
Other Organs of Special Sense	43	—	42	1	119	—	52	—	14	—
Circulatory System	28	1	22	1	30	2	41	1	9	1
Respiratory ,,	94	3	32	1	128	7	72	1	18	—
Digestive ,,	333	13	129	8	442	15	479	5	99	5
Lymphatic and Glandular System	76	—	33	—	72	—	46	—	12	—
Urinary System	7	2	4	1	8	1	6	—	3	1
Generative System	421	—	138	—	345	—	229	—	70	—
Organs of Locomotion	39	—	12	—	70	—	55	—	17	—
Connective Tissue	59	—	37	—	116	—	44	—	14	—
Skin	133	—	127	—	458	—	103	—	48	—
INJURIES.										
General	5	2	9	5	65	9	10	1	4	2
Local	235	2	99	3	441	3	222	—	89	1
In Action	—	—	—	—	—	—	—	—	—	—
POISONS	1	—	—	—	4	1	1	—	—	—
No appreciable disease	7	—	4	—	10	—	5	—	4	—
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—	—	—	—
General Total	3,095	42	1,694	40	4,774	76	2,931	38	1,146	18

of the DIFFERENT CLASSES of DISEASES in each of the MILITARY DISTRICTS in

Bundelkhand.		Meerut.		Sirhind.		Lahore.		Rawal Pindi.		Peshawar.		Madras.		Southern District.		Bangalore.		Belgaum.	
2,347		4,381		4,003		4,215		6,303		2,831		971		1,429		2,196		1,621	
Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
5	—	—	—	2	—	4	—	—	—	7	2	—	—	—	—	—	—	—	—
2	—	—	—	14	—	—	—	—	—	1	—	86	1	—	—	4	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1
1	—	8	—	3	—	—	—	4	—	—	—	17	—	3	—	3	—	11	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
69	20	123	29	143	25	27	7	110	25	74	22	7	3	12	—	41	9	14	6
24	—	10	—	45	—	263	—	58	—	12	—	5	—	2	—	23	—	34	—
—	—	—	—	8	6	15	12	12	8	5	5	—	—	—	—	—	—	—	—
58	6	71	1	41	1	38	6	65	—	27	1	32	—	33	2	30	2	20	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
781	—	1017	—	804	3	2,175	3	1,364	2	1,146	—	34	1	113	1	193	—	598	—
1	—	5	—	2	—	5	—	22	—	4	—	—	—	1	—	—	—	—	—
8	2	9	2	11	1	22	3	24	—	4	—	5	1	15	—	6	—	1	—
22	—	86	—	127	—	152	—	158	—	21	—	43	—	88	—	53	—	72	—
70	—	218	1	158	—	258	—	200	1	62	—	47	—	124	—	170	—	117	—
348	—	423	—	318	—	405	—	454	—	117	—	114	—	170	—	250	—	229	—
—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
9	—	49	—	72	—	43	—	75	1	10	—	25	—	44	—	53	—	41	—
—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
13	1	6	1	10	—	13	—	14	1	12	—	3	—	10	—	3	—	3	—
45	—	81	—	88	—	59	—	123	1	45	—	17	—	15	—	44	—	26	—
109	—	106	—	110	—	119	—	94	—	205	—	32	—	62	—	25	—	22	—
16	—	16	1	22	—	16	—	43	—	12	1	3	—	12	—	8	—	14	1
26	—	37	2	34	—	18	1	39	2	18	—	12	—	11	—	20	—	22	—
3	1	5	—	2	—	7	—	16	—	7	—	1	—	2	—	—	—	3	—
33	—	39	—	24	—	45	—	65	—	12	—	11	—	20	—	16	—	25	—
61	—	67	—	61	—	54	—	64	—	33	—	33	—	33	—	44	—	26	—
38	4	93	2	51	3	79	3	82	6	50	4	21	1	48	—	26	—	27	2
53	6	126	7	118	3	107	—	119	2	58	2	34	—	46	—	33	—	28	—
273	7	403	9	547	7	367	2	652	8	178	5	100	4	191	2	203	3	203	2
70	—	87	—	96	—	57	—	117	—	23	—	54	—	43	—	51	—	44	—
7	1	8	—	13	—	15	1	9	—	6	2	4	—	7	1	11	1	4	—
297	—	240	—	222	—	217	—	399	—	96	—	78	—	76	—	291	—	122	1
32	—	57	—	57	1	55	—	89	—	42	—	20	—	48	—	43	—	42	—
54	—	105	—	109	1	79	—	110	—	96	—	15	—	59	—	76	—	41	—
165	—	223	—	229	—	207	—	207	—	110	—	100	—	94	—	115	—	71	—
30	2	42	6	26	3	27	7	9	3	11	6	1	1	1	1	2	1	8	—
212	2	393	7	428	—	368	6	640	3	213	—	82	3	192	—	252	1	173	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3	—	3	2	93	—	9	1	3	—	4	1	4	—	—	—	—	—	—	—
2	—	15	—	11	—	16	—	17	—	8	—	2	—	18	—	13	—	1	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2,940	82	4,171	70	4,099	54	5,342	52	5,460	64	2,729	51	1,042	15	1,513	7	2,103	17	2,043	13

ABSTRACT No. XXI.—TABLE showing the AVERAGE STRENGTH, ADMI the TROOPS stationed in SOUTH CHINA during the Year 1903, wit

Average Strength, 1,220. Diseases.	Admissions into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number sent Home.	Invalids. Number finally Discharged the Service.
GENERAL DISEASES.						
Small-pox	—	—	—	—	—	—
Other Eruptive Fevers	1	—	—	—	—	—
Plague	—	—	—	—	—	—
Influenza	2	—	—	—	—	—
Diphtheria	—	—	—	—	—	—
Enteric Fever	4	3	—	3	—	—
Other Continued Fevers	—	—	—	—	—	—
Cholera	—	—	—	—	—	—
Dysentery	10	2	—	2	—	—
Yellow Fever	—	—	—	—	—	—
Malarial Fevers	937	2	1	3	6	1
Septic Diseases	—	—	—	—	—	—
Tubercular Diseases	3	—	—	—	3	3
Syphilis, Primary	16	—	—	—	—	—
,, Secondary	29	—	—	—	—	—
Gonorrhœa	271	—	—	—	—	—
Hydrophobia	—	—	—	—	—	—
Parasitic Diseases	68	—	—	—	7	7
Scurvy	—	—	—	—	—	—
Alcoholism	2	—	—	—	—	—
Rheumatism	8	—	—	—	1	—
Debility	6	—	—	—	1	—
Other General Diseases	8	—	—	—	3	1
LOCAL DISEASES.						
Diseases of the—						
Nervous System { Nervous	27	1	—	1	4	3
Nervous System { Mental	4	—	—	—	1	3
Eye	15	—	—	—	1	1
Other Organs of Special Sense	17	—	—	—	1	2
Circulatory System	32	1	—	1	1	—
Respiratory ,,	26	—	—	—	—	—
Digestive ,,	144	1	—	1	1	1
Lymphatic ,,	17	—	—	—	—	—
Urinary ,,	4	—	—	—	—	—
Generative ,,	136	—	—	—	—	—
Organs of Locomotion	5	—	—	—	—	—
Connective Tissue	34	—	—	—	—	—
Skin	58	—	—	—	—	—
INJURIES.						
General	4	1	—	1	—	—
Local	108	1	—	1	—	—
In Action	—	—	—	—	—	—
POISONS	—	—	—	—	—	—
No appreciable disease	—	—	—	—	—	—
Cause unknown (refers to deaths only)	—	—	—	—	—	—
General Total	1,996	12	1	13	30	22

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK among Ratios per 1,000 of the Strength, and the Average Ratios for 10 years.

Ratio per 1,000.					Average Ratio per 1,000 from 1893 to 1902.				
Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.	Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
—	—	—	—	—	·3	—	—	—	·01
·9	—	—	—	·05	13·0	—	—	—	·39
—	—	—	—	—	1·7	·53	—	—	·15
1·6	—	—	—	·10	2·9	—	—	—	·11
—	—	—	—	—	·1	—	—	—	—
3·3	2·46	—	—	·41	2·2	·06	·27	—	·39
—	—	—	—	—	15·6	—	·13	—	·62
-	—	—	—	—	·3	·20	—	—	·01
8·2	1·64	—	—	·84	7·5	·33	1·07	—	·69
—	—	—	—	—	—	—	—	—	—
768·0	2·46	4·91	·82	30·34	562·5	3·00	13·46	1·07	20·08
—	—	—	—	—	·5	·07	·07	—	·05
2·5	—	2·46	2·46	·64	3·5	·73	2·26	1·66	·66
13·1	—	—	—	1·30	52·2	—	—	—	5·21
23·8	—	—	—	2·94	69·5	·33	5·59	1·07	6·60
222·1	—	—	—	19·39	198·0	—	·87	·07	16·32
—	—	—	—	—	—	—	—	—	—
55·7	—	5·74	5·74	2·07	20·2	—	—	—	·68
—	—	—	—	—	—	—	—	—	—
1·6	—	—	—	·06	5·4	·40	·27	·13	·2
6·6	—	·82	—	·70	24·5	·07	1·40	·33	1·4
4·9	—	·82	—	·56	22·0	·07	8·19	1·53	1·20
6·6	—	2·46	82	1·00	13·3	·20	1·27	·07	·91
22·1	·82	3·28	2·46	2·99	11·8	·47	1·66	·60	·65
3·3	—	·82	2·46	1·07	1·7	·13	1·53	1·33	·32
12·3	—	·82	·82	·67	11·7	—	1·00	·53	·71
13·9	—	·82	1·64	·61	29·4	—	3·26	1·20	1·58
26·2	·82	·82	—	2·86	14·5	·80	4·66	2·66	1·36
21·3	—	—	—	1·21	29·8	·27	1·00	·60	1·57
118·0	·82	·82	·82	5·30	115·8	·87	3·06	·47	4·59
13·9	—	—	—	·81	35·2	—	·47	·20	3·92
3·3	—	—	—	·33	3·1	·27	·60	·20	·30
111·5	—	—	—	10·11	144·4	—	·40	·20	11·77
4·1	—	—	—	·12	12·6	—	1·07	·73	·76
27·9	—	—	—	·75	29·3	—	·13	—	1·23
67·5	—	—	—	1·90	72·3	—	·13	—	3·00
3·3	·82	—	—	·07	2·5	2·13	—	—	·10
88·5	·82	—	—	3·34	108·4	1·00	·80	·47	4·72
—		—	—	—	—	—	—	—	—
—	—	—	—	—	·1	·07	—	—	—
—	—	—	—	—	3·7	—	—	—	·10
—	—	—	—	—	—	—	—	—	—
1,636·1	10·66	24·59	18·03	92·53	1,641·5	12·59	54·62	15·12	92·47

ABSTRACT No. XXIa.—Table showing the Average Strength, Admissions into Hospital, Deaths, Numbers Invalided and Constantly Sick, among the Troops stationed in North China during the year 1903, with the ratios per 1,000 of the Strength, and the Average Ratios for 10 years.*

Average Strength, 472. Diseases.	Admissions into Hospital.	Deaths. In the Command.	Deaths. Total.	Number of Invalids sent Home.	Average number constantly sick.	Ratio per 1,000. Admissions.	Deaths.	Invalids sent Home.	Constantly Sick.
GENERAL DISEASES.									
Small-pox	1	—	—	—	·10	2·1	—	—	·21
Other Eruptive Fevers	1	—	—	—	·03	2·1	—	—	·06
Influenza	2	—	—	—	·05	4·2	—	—	·11
Diphtheria	—	—	—	—	—	—	—	—	—
Enteric Fever	9	3	3	—	·98	19·1	6·36	—	2·08
Other Continued Fevers	2	—	—	—	·10	4·2	—	—	·21
Cholera	—	—	—	—	—	—	—	—	—
Dysentery	6	—	—	—	·68	12·7	—	—	1·44
Yellow Fever	—	—	—	—	—	—	—	—	—
Malarial Fevers	19	—	—	1	·53	40·3	—	2·12	1·12
Septic Diseases	3	2	2	—	·05	6·4	4·24	—	·11
Tubercular Diseases	3	—	—	2	·30	6·4	—	4·24	·64
Syphilis, Primary	46	—	—	—	3·08	97·5	—	—	6·53
,, Secondary	27	—	—	—	1·56	57·2	—	—	3·31
Gonorrhœa	122	—	—	—	8·64	258·5	—	—	18·31
Hydrophobia	—	—	—	—	—	—	—	—	—
Parasitic Diseases	7	—	—	—	·34	14·8	—	—	·72
Scurvy	—	—	—	—	—	—	—	—	—
Alcoholism	2	—	—	—	·04	4·2	—	—	·08
Rheumatism	2	—	—	1	·16	4·2	—	2·12	·34
Debility	1	—	—	1	10	2·1	—	2·12	·21
Other General Diseases	3	—	—	1	·33	6·4	—	2·12	·70
LOCAL DISEASES.									
Diseases of the—									
Nervous System { Nervous	2	1	1	—	·20	4·2	2·12	—	·42
Nervous System { Mental	—	—	—	—	—	—	—	—	—
Eye	1	—	—	1	·07	2·1	—	2·12	·15
Other Organs of Special Sense	1	—	—	1	·10	2·1	—	2·12	·21
Circulatory System	—	—	—	—	—	—	—	—	—
Respiratory ,,	7	—	—	—	·38	14·8	—	—	·81
Digestive ,,	13	1	1	—	·76	27·5	2·12	—	1·49
Lymphatic ,,	7	—	—	—	·76	14·8	—	—	1·61
Urinary ,,	1	—	—		·02	2·1	—	—	·04
Generative ,,	35	—	—		1·83	74·2	—	—	3·85
Organs of Locomotion	4	—	—	—	·26	8·5	—	—	·55
Connective Tissue	4	—	—	—	·11	8·5	—	—	·23
Skin	5	—	—	—	·20	10·6	—	—	·61
INJURIES.									
General	—	1	1	—			2·12	—	—
Local	26	1	1	—	·87	55·1	2·12	—	1·84
In Action	—	—	—	—		—	—		
POISONS.									
No appreciable disease	7	—	—	—	·30	14·8	—	—	·64
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—	—	—
General Total	369	9	9	8	22·92	781·8	19·07	16·96	48·56

* The average ratios for 10 years will be given in future years.

ABSTRACT No. XXII.

ABSTRACT No. XXII.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS, and DEATHS among the TROOPS stationed in the STRAITS SETTLEMENTS during the Ten Years 1873 to 1882 for 10 years.

Average Strength, 813. Diseases.	Admissions into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number sent Home.	Invalids. Number finally Discharged the Service.	Average number constantly Sick.
GENERAL DISEASES.							
Small-pox	—	—	—	—	—	—	—
Other Eruptive Fevers	7	—	—	—	—	—	·19
Influenza	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—
Enteric Fever	2	—	—	—	1	—	·40
Other Continued Fevers	78	—	—	—	—	—	1·78
Cholera	—	—	—	—	—	—	—
Dysentery	—	—	—	—	—	—	—
Yellow Fever	—	—	—	—	—	—	—
Malarial Fevers	662	3	—	3	13	1	22·43
Septic Diseases	—	—	—	—	—	—	—
Tubercular Diseases	3	1	—	1	—	—	·18
Syphilis, Primary	15	—	—	—	—	—	1·41
,, Secondary	13	—	—	—	—	—	1·69
Gonorrhœa	165	—	—	—	—	—	11·64
Hydrophobia	—	—	—	—	—	—	—
Parasitic Diseases	8	—	—	—	—	—	·11
Scurvy	—	—	—	—	—	—	—
Alcoholism	4	1	—	1	—	—	·11
Rheumatism	14	—	—	—	1	—	·92
Debility	21	—	—	—	3	1	1·09
Other General Diseases	7	—	—	—	1	1	·38
LOCAL DISEASES.							
Diseases of the—							
Nervous System { Nervous	7	—	—	—	2	[illegible]	·69
Nervous System { Mental	3	—	—	—	1	[illegible]	·83
Eye	2	—	—	—	1	1	·18
Other Organs of Special Sense	23	—	—	—	1	—	·77
Circulatory System	11	1	—	1	2	—	·68
Respiratory ,,	18	1	—	1	1	—	·80
Digestive ,,	68	1	—	1	2	—	1·65
Lymphatic ,,	36	—	—	—	—	—	2·50
Urinary ,,	1	—	—	—	—	—	·01
Generative ,,	96	—	—	—	—	—	5·73
Organs of Locomotion	18	—	—	—	—	—	·74
Connective Tissue	32	—	—	—	—	—	1·05
Skin	38	—	—	—	—	—	1·25
INJURIES.							
General	6	4	—	4	—	—	·05
Local	72	—	—	—	—	1	2·45
In Action	—	—	—	—	—	—	—
POISONS	—	—	—	—	—	—	—
No appreciable disease	2	—	—	—	—	—	·03
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	1,422	12	—	12	29	9	61·74

SIONS into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK year 1903, with the Ratios per 1,000 of the Strength, and the Average Ratios

Ratio per 1,000.					Average Ratio per 1,000 from 1893 to 1902.				
Admissions.	Deaths.	Invalids sent Home.	Invalids finally discharged.	Constantly Sick.	Admissions.	Deaths.	Invalids sent Home.	Invalids finally discharged.	Constantly Sick.
—	—	—	—	—	·3	—	—	—	·03
8·6	—	—	—	·23	·5	·09	—	—	·02
—	—	—	—	—	2·8	—	—	—	·11
—	—	—	—	—	—	—	—	—	—
2·5	—	1·23	—	·49	·7	·37	·28	—	·19
95·9	—	—	—	2·19	61·6	—	·09	—	1·97
—	—	—	—	—	·1	·09	—	—	—
—	—	—	—	—	5·1	·18	—	—	·35
—	—	—	—	—	—	—	—	—	—
814·3	3·69	15·99	1·23	27·59	247·7	1·01	1·57	—	6·48
—	—	—	—	—	·3	—	—	—	·02
3·7	1·23	—	—	·22	2·8	·83	1·57	1·11	·57
18·5	—	—	—	1·73	98·8	—	—	—	8·96
16·0	—	—	—	2·08	95·2	·55	4·70	1·75	9·78
203·0	—	—	—	14·32	134·5	·09	·64	·28	9·64
—	—	—	—	—	—	—	—	—	—
9·8	—	—	—	·14	10·9	—	—	—	·26
—	—	—	—	—	—	—	—	—	—
4·9	1·23	—	—	·14	3·4	·09	—	—	·15
17·2	—	1·23	—	1·13	15·6	—	1·10	·18	1·25
25·8	—	3·69	1·23	1·34	15·5	—	2·12	·55	1·25
8·6	—	1·23	1·23	·47	3·9	—	·18	·09	·25
3·6	—	2·46	2·46	·85	6·7	·83	·74	·46	·45
3·7	—	1·23	2·46	1·02	1·4	—	1·10	1·01	·30
2·5	—	1·23	1·23	·22	9·4	—	·37	—	·63
28·3	—	1·23	—	·94	14·8	—	·55	·55	·65
13·5	1·23	2·46	—	·84	4·7	·09	1·38	·65	·68
22·1	1·23	1·23	—	·98	14·8	·65	·28	·09	1·09
33·6	1·23	2·46	—	2·03	54·3	·74	1·01	—	2·10
44·3	—	—	—	3·08	31·4	—	·28	·09	3·74
1·2	—	—	—	·01	2·5	·28	·18	—	·24
105·8	—	—	—	7·05	68·4	·09	·46	—	5·36
22·1	—	—	—	·91	8·5	—	·46	·18	·46
39·4	—	—	—	1·29	27·9	—	—	—	1·27
46·7	—	—	—	1·54	40·5	—	·09	·09	2·24
7·4	4·92	—	—	·06	·7	·74	—	—	·02
88·6	—	—	1·23	3·01	85·4	·55	·09	—	3·65
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	·3	—	—	—	—
2·5	—	—	—	·04	2·8	—	—	—	·14
—	—	—	—	—	—	—	—	—	—
1,149·1	14·75	35·67	11·07	75·94	1,074·2	7·21	19·24	7·09	64·38

ABSTRACT No. XXIII.—TABLE showing the AVERAGE STRENGTH, ADMIS- among the TROOPS stationed in INDIA during the year 1903, with the

Average Strength, 69,613. Diseases.	Admissions into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number sent home.	Invalids. Number finally discharged the service.	Average Number constantly Sick.
GENERAL DISEASES.							
Small-pox	68	8	—	8	—	—	8·24
Other Eruptive Fevers	354	3	—	3	—	—	12·49
Plague	12	2	—	2	—	—	1·40
Influenza	192	—	—	—	—	—	8·35
Diphtheria	—	—	—	—	—	—	—
Enteric Fever	1,386	291	1	292	46	8	203·88
Other Continued Fevers	1,308	1	—	1	6	1	59·24
Cholera	79	56	—	56	—	—	1·63
Dysentery	1,123	41	1	42	89	2	93·59
Yellow Fever	—	—	—	—	—	—	—
Malarial Fevers	17,037	31	4	35	244	23	571·47
Septic Diseases	73	5	2	7	—	1	4·61
Tubercular Diseases	265	23	4	27	101	66	58·58
Syphilis, Primary	2,234	—	—	—	1	—	231·05
,, Secondary	3,248	10	2	12	190	71	350·66
Gonorrhœa	7,456	—	—	—	21	6	578·72
Hydrophobia	1	1	—	1	—	—	·06
Parasitic Diseases	1,263	1	—	1	159	138	83·50
Scurvy	5	—	—	—	—	—	·55
Alcoholism	169	4	—	4	1	—	7·36
Rheumatism	1,105	2	1	3	53	12	75·00
Debility	1,563	2	—	2	213	43	110·10
Other General Diseases	462	16	4	20	14	5	29·89
LOCAL DISEASES.							
Diseases of the—							
Nervous System { Nervous	584	18	1	19	93	70	36·05
Nervous System { Mental	101	2	—	2	78	87	25·74
Eye	708	—	—	—	52	35	44·67
Other Organs of Special Sense	1,105	1	—	1	67	38	56·89
Circulatory System	1,113	54	3	57	258	159	108·84
Respiratory ,,	1,754	54	2	56	28	13	108·65
Digestive ,,	6,881	127	4	131	179	35	316·75
Lymphatic ,,	1,406	—	1	1	12	3	180·51
Urinary ,,	174	14	1	15	23	10	14·52
Generative ,,	5,274	1	—	1	12	7	461·28
Organs of Locomotion	1,015	1	1	2	65	42	60·92
Connective Tissue	1,641	1	—	1	4	—	71·77
Skin	3,761	—	—	—	6	2	169·14
INJURIES.							
General	321	74	—	74	12	2	17·39
Local	6,402	46	—	46	62	30	258·70
In Action	—	—	—	—	—	—	—
POISONS	138	6	—	6	3	—	6·01
No appreciable disease	210	—	—	—	—	—	9·77
Details not available	—	—	—	—	—	—	—
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	72,081	896	32	928	2,062	909	4,397·17

SIONS into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK Ratios per 1,000 of the Strength, and the Average Ratios for 10 Years.

Ratio per 1,000.					Average Ratio per 1,000 from 1893 to 1902.				
Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.	Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
1·0	·11	—	—	·12	·5	·05	—	—	·04
5·1	·04	—	—	·18	1·6	·01	·00	—	·06
·2	·03	—	—	·02	·0	·01	·00	—	·01
2·6	—	—	—	·12	6·1	·03	·00	·00	·26
—	—	—	—	—	·0	·01	·00	—	·00
19·6	4·19	·66	·11	2·93	22·5	5·94	·62	·02	3·25
18·8	·01	·09	·01	·85	28·2	·03	·05	·01	1·33
1·1	·80	—	—	·03	·9	·89	·00	—	·02
16·8	·80	·85	·03	1·24	26·3	·80	1·11	·13	1·87
—	—	—	—	—	—	—	—	—	—
244·7	·50	3·81	·33	8·21	331·7	·68	3·82	·47	12·05
1·1	·10	—	·01	·07	1·3	·10	·01	·01	·09
3·8	·89	1·45	·95	·84	4·3	·83	1·89	1·15	·74
33·5	—	·01	—	3·22	104·4	·00	·05	·01	9·80
46·7	·17	2·73	1·02	5·04	76·3	·23	5·86	2·07	8·01
107·1	—	·30	·09	8·21	159·5	·00	·37	·14	12·33
·0	·01	—	—	·00	·0	·04	—	—	·00
19·1	·01	2·28	1·98	1·20	10·6	·00	·01	·60	·40
·1	—	—	—	·01	·3	·00	·01	·00	·02
2·4	·06	·01	—	·11	4·1	·09	·03	·01	·15
15·9	·04	·76	·17	1·08	26·8	·03	·98	·38	1·96
22·5	·03	3·06	·62	1·58	21·2	·02	3·23	·78	1·48
6·6	·29	·20	·07	·43	7·4	·16	·53	·15	·54
8·4	·27	1·34	1·01	·52	7·5	·31	1·12	·85	·56
1·5	·03	1·12	1·25	·27	1·4	·03	1·22	1·38	·41
10·2	—	·75	·50	·44	10·8	—	·56	·39	·69
15·9	·01	·96	·55	·80	14·6	·01	1·01	·72	·82
16·0	·82	3·71	2·30	1·57	11·2	·56	3·28	2·49	1·15
25·2	·80	·40	·19	1·56	29·7	·82	·55	·22	1·70
98·8	1·88	2·57	·50	4·55	111·9	1·89	2·27	·59	5·09
20·2	·01	·17	·04	2·16	27·8	·02	·31	·11	3·23
2·5	·22	·33	·14	·21	2·1	·19	·34	·19	·21
75·8	·01	·17	·10	6·63	85·0	·01	·23	·11	6·61
14·6	·03	·93	·60	·88	10·9	·03	·92	·57	·80
23·6	·01	·03	—	1·03	22·4	·01	·10	·04	1·09
54·0	—	·09	·03	2·29	54·5	·00	·15	·06	2·40
4·6	1·06	·17	·03	·25	3·7	1·19	·12	·08	·19
92·0	·66	·89	·43	3·72	96·5	·66	·95	·56	4·48
—	—	—	—	—	·0	·00	—	·13	·00
2·0	·09	·04	—	·09	·9	·11	·09	·00	·03
3·0	—	—	—	·14	2·3	—	—	—	·11
—	—	—	—	—	—	—	—	—	·24
—	—	—	—	—	—	·00	—	—	—
1,036·5	13·23	29·62	13·06	63·17	1,327·1	15·61	31·62	13·81	84·04

ABSTRACT No. XXIV.—TABLE showing the PREVALENCE and MORTALITY INDIA with the ratios per 1,000 of Strength, during the year 1903.

Military Districts.	Presidency.		Allahabad.		Oudh.		Rohilkhand.		Narbudda.	
Average Strength.	2,883		1,563		5,268		3,610		1,094	
Diseases.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
GENERAL DISEASES.										
Small-pox	1	—	4	—	26	5	4	—	—	—
Other Eruptive Fevers	3	—	—	—	3	—	11	2	—	—
Plague	—	—	—	—	—	—	—	—	—	—
Influenza	44	—	—	—	12	—	43	—	12	—
Diphtheria	—	—	—	—	—	—	—	—	—	—
Enteric Fever	19	4	38	13	139	20	58	5	36	5
Other Continued Fevers	36	—	47	—	272	—	62	—	69	—
Cholera	8	5	2	1	1	—	25	17	—	—
Dysentery	86	2	24	1	99	3	61	3	29	—
Yellow Fever	—	—	—	—	—	—	—	—	—	—
Malarial Fevers	512	1	415	2	608	—	359	—	314	—
Septic Diseases	2	—	2	—	2	1	4	1	2	—
Tubercular Diseases	4	1	3	—	9	2	16	1	5	1
Syphilis, Primary	48	—	22	—	154	—	131	—	18	—
,, Secondary	191	1	58	1	133	2	136	1	51	—
Gonorrhœa	414	—	223	—	664	—	390	—	104	—
Hydrophobia	—	—	—	—	—	—	—	—	—	—
Parasitic Diseases	81	—	58	—	56	—	29	—	12	—
Scurvy	—	—	—	—	1	—	—	—	—	—
Alcoholism	14	—	1	—	11	1	4	—	4	—
Rheumatism	40	—	29	1	57	—	56	—	23	—
Debility	52	1	32	—	86	1	64	—	42	—
Other General Diseases	6	2	19	1	47	1	37	—	6	1
LOCAL DISEASES.										
Diseases of the—										
Nervous System { Nervous Diseases	18	2	6	—	26	2	54	—	4	1
Nervous System { Mental ,,	3	—	4	—	5	—	—	—	3	—
Eye	32	—	19	—	55	—	42	—	11	—
Other Organs of Special Sense	43	—	42	1	119	—	52	—	14	—
Circulatory System	28	1	22	1	30	2	41	1	9	1
Respiratory ,,	94	3	32	1	128	7	72	1	18	—
Digestive ,,	333	13	129	8	442	15	479	5	99	5
Lymphatic and Glandular System	76	—	33	—	72	—	46	—	12	—
Urinary System	7	2	4	1	8	1	6	—	3	1
Generative System	421	—	138	—	345	—	229	—	70	—
Organs of Locomotion	39	—	12	—	70	—	55	—	17	—
Connective Tissue	59	—	37	—	116	—	44	—	14	—
Skin	133	—	127	—	458	—	103	—	48	—
INJURIES.										
General	5	2	9	5	65	9	10	1	4	2
Local	235	2	99	3	441	3	222	—	89	1
In Action	—	—	—	—	—	—	—	—	—	—
POISONS	1	—	—	—	4	1	1	—	—	—
No appreciable disease	7	—	4	—	10	—	5	—	4	—
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—	—	—	—
General Total	3,095	42	1,694	40	4,774	76	2,931	38	1,146	18

of the DIFFERENT CLASSES of DISEASES in each of the MILITARY DISTRICTS in

Bundelkhand.		Meerut.		Sirhind.		Lahore.		Rawal Pindi.		Peshawar.		Madras.		Southern District.		Bangalore.		Belgaum.	
2,347		4,381		4,003		4,215		6,303		2,831		971		1,429		2,196		1,621	
Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
5	—	—	—	2	—	4	—	—	—	7	2	—	—	—	—	—	—	—	—
2	—	—	—	14	—	—	—	—	—	1	—	86	1	—	—	4	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1
1	—	8	—	3	—	—	—	4	—	—	—	17	—	3	—	3	—	11	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
69	29	123	29	143	25	27	7	110	25	74	22	7	3	12	—	41	9	14	6
24	—	10	—	45	—	263	—	58	—	12	—	5	—	2	—	23	—	34	—
—	—	—	—	8	6	15	12	12	8	5	5	—	—	—	—	—	—	—	—
58	6	71	1	41	1	38	6	65	—	27	1	32	—	33	2	30	2	20	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
781	—	1017	—	804	3	2,175	3	1,364	2	1,146	—	34	1	113	1	193	—	598	—
1	—	5	—	2	—	5	—	22	—	4	—	—	—	1	—	—	—	—	—
8	2	9	2	11	1	22	3	24	—	4	—	5	1	5	—	6	—	1	—
22	—	86	—	127	—	152	—	158	—	21	—	43	—	88	—	53	—	72	—
70	—	218	1	158	—	258	—	200	1	62	—	47	—	124	—	170	—	117	—
348	—	423	—	318	—	405	—	454	—	117	—	114	—	170	—	250	—	229	—
—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
9	—	49	—	72	—	43	—	75	1	10	—	25	—	44	—	53	—	41	—
—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
13	1	6	1	10	—	13	—	14	1	12	—	3	—	10	—	3	—	3	—
45	—	81	—	88	—	59	—	125	1	45	—	17	—	15	—	44	—	26	—
109	—	106	—	110	—	119	—	94	—	205	—	32	—	62	—	25	—	22	—
16	—	16	1	22	—	16	—	43	—	12	1	3	—	12	—	8	—	14	1
26	—	37	2	34	—	18	1	39	2	18	—	12	—	11	—	20	—	22	—
3	1	5	—	2	—	7	—	16	—	7	—	1	—	2	—	—	—	3	—
33	—	39	—	24	—	45	—	65	—	12	—	11	—	20	—	16	—	25	—
61	—	67	—	61	—	54	—	64	—	33	—	33	—	33	—	44	—	26	—
38	4	93	2	51	3	79	3	82	6	50	4	21	1	48	—	26	—	27	2
53	6	126	7	118	3	107	—	119	2	58	2	34	—	46	—	33	—	28	—
273	7	403	9	547	7	367	2	652	8	178	5	100	4	191	2	203	3	203	2
70	—	87	—	96	—	57	—	117	—	23	—	54	—	43	—	51	—	44	—
7	1	8	—	13	—	15	1	9	—	6	2	4	—	7	1	11	1	4	—
297	—	240	—	222	—	217	—	399	—	96	—	78	—	76	—	291	—	122	1
32	—	57	—	57	1	55	—	89	—	42	—	20	—	48	—	43	—	42	—
54	—	105	—	109	1	79	—	110	—	96	—	15	—	59	—	76	—	41	—
165	—	223	—	229	—	207	—	207	—	110	—	100	—	94	—	115	—	71	—
30	2	42	6	26	3	27	7	9	3	11	6	1	1	1	1	2	1	8	—
212	2	393	7	428	—	368	6	640	3	213	—	82	3	192	—	252	1	173	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3	—	3	2	93	—	9	1	3	—	4	1	4	—	—	—	—	—	—	—
2	—	15	—	11	—	16	—	17	—	8	—	2	—	18	—	13	—	1	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2,940	52	4,171	70	4,099	54	5,342	52	5,460	64	2,729	51	1,042	15	1,513	7	2,103	17	2,043	13

ABSTRACT No. XXIV. (continued).—TABLE showing the PREVALENCE and MORTALITY INDIA, with the ratios per 1,000 of Strength, during the year 1903

Military Districts.	Secunderabad.		Rangoon.		Mandalay.		Poona.		Mhow.		Bombay.	
Average strength.	3,084		975		2,563		4,264		2,685		2,199	
Diseases.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
GENERAL DISEASES.												
Small-pox	—	—	—	—	—	—	2	—	—	—	4	—
Other Eruptive Fevers	10	—	153	—	60	—	1	—	1	—	4	—
Plague	—	—	—	—	—	—	6	—	4	1	—	—
Influenza	—	—	3	—	6	—	5	—	—	—	1	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever	32	8	9	2	18	9	87	23	177	32	16	2
Other Continued Fevers	55	—	13	—	43	—	3	—	87	—	7	—
Cholera	—	—	—	—	1	1	—	—	—	—	—	—
Dysentery	57	1	64	8	24	—	42	—	69	3	31	—
Yellow Fever	—	—	—	—	—	—	—	—	—	—	—	—
Malarial Fevers	362	1	286	—	499	9	654	1	1,427	2	376	2
Septic Diseases	—	—	1	—	—	—	6	—	6	2	—	1
Tubercular Diseases	8	—	4	—	9	1	20	3	6	—	58	4
Syphilis, Primary	407	—	60	—	64	—	179	—	44	—	207	—
,, Secondary	214	—	103	—	192	—	248	1	89	—	156	—
Gonorrhœa	374	—	213	—	256	—	713	—	275	—	260	—
Hydrophobia	—	—	—	—	—	—	—	—	—	—	—	—
Parasitic Diseases	29	—	64	—	95	—	69	—	51	—	157	—
Scurvy	—	—	—	—	—	—	—	—	3	—	—	—
Alcoholism	5	—	2	—	4	—	14	—	3	—	6	—
Rheumatism	41	—	11	—	50	—	62	—	23	—	30	—
Debility	29	—	11	—	32	—	62	—	63	—	60	—
Other General Diseases	7	1	2	—	23	3	32	1	31	—	17	—
LOCAL DISEASES.												
Diseases of the—												
Nervous System—Nervous Diseases	25	—	17	1	27	—	32	1	13	1	59	—
Nervous System—Mental ,,	2	—	2	—	6	—	3	—	2	—	5	1
Eye	45	—	9	—	18	—	47	—	44	—	11	—
Other Organs of Special Sense	49	—	29	—	41	—	60	—	40	—	43	—
Circulatory System	51	3	6	—	45	1	76	2	40	3	78	3
Respiratory ,,	79	1	53	1	71	3	96	2	64	1	69	3
Digestive ,,	339	1	115	3	207	4	337	3	328	5	186	7
Lymphatic and Glandular System	37	—	41	—	66	—	131	—	34	—	58	—
Urinary System	9	1	3	—	9	—	6	1	5	—	15	—
Generative System	210	—	139	—	257	—	493	—	160	—	90	—
Organs of Locomotion	53	—	29	—	44	—	52	—	36	—	24	—
Connective Tissue	128	—	20	—	43	—	93	—	116	—	30	—
Skin	183	—	76	—	158	—	166	—	199	—	82	—
INJURIES.												
General	2	—	1	—	2	—	2	1	25	9	9	1
Local	375	3	78	—	201	—	455	2	397	2	149	1
In Action	—	—	—	—	—	—	—	—	—	—	—	—
POISONS	1	—	1	—	1	—	3	—	2	—	—	—
No appreciable disease	15	—	8	—	10	—	16	—	11	—	8	—
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—	—	—	—	—	—
General Total	3,233	20	1,626	15	2,582	31	4,273	41	3,875	61	2,306	25

of the DIFFERENT CLASSES OF DISEASES in each of the MILITARY DISTRICTS in —concluded.

Deesa.		Aden.		Sind.		Nagpur.		Quetta.		Delhi Coronation Durbar and Manœuvres.		Trichinopoly Boer Guard.		Marching.		Total.	
697		931		1,637		986		2,447		774		36		1,620		69,613	
Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
—	—	1	1	—	—	—	—	—	—	5	—	—	—	3	—	68	8
—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	354	3
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12	2
—	—	—	—	—	—	14	—	2	—	—	—	—	—	—	—	192	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12	2	5	2	4	2	26	5	42	6	12	5	—	—	16	—	1,366	291
1	—	21	—	3	1	4	—	100	—	—	—	1	—	8	—	1,308	1
—	—	—	—	—	—	—	—	2	1	—	—	—	—	—	—	79	56
5	—	25	—	15	—	9	1	32	—	13	—	—	—	33	—	1,133	41
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
447	1	610	—	659	—	500	—	246	—	66	1	4	—	468	1	17,037	31
—	—	—	—	—	—	—	—	4	—	1	—	—	—	3	—	73	5
2	—	1	—	—	—	3	1	7	—	3	—	—	—	2	—	265	23
20	—	36	—	38	—	36	—	10	—	17	—	—	—	21	—	2,334	—
49	—	28	—	42	1	44	—	52	1	11	—	4	—	23	—	3,248	10
46	—	98	—	177	—	105	—	127	—	74	—	2	—	113	—	7,456	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
7	—	55	—	24	—	31	—	14	—	2	—	—	—	8	—	1,263	1
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	—
3	—	7	—	1	—	—	—	2	—	1	—	—	—	—	—	169	4
7	—	17	—	13	—	25	—	54	—	6	—	—	—	16	—	1,105	2
19	—	13	—	20	—	34	—	43	—	2	—	—	—	15	—	1,563	2
3	—	17	2	11	—	14	—	26	1	1	—	—	—	1	—	462	16
7	—	41	—	11	—	3	—	12	1	3	1	—	—	9	3	584	18
1	—	4	—	5	—	1	—	6	—	3	—	—	—	—	—	101	2
4	—	16	—	16	—	19	—	17	—	2	—	1	—	10	—	708	—
3	—	24	—	12	—	27	—	22	—	3	—	—	—	6	—	1,105	1
8	1	62	1	37	—	18	—	36	6	3	1	—	—	8	2	1,113	54
8	—	29	2	22	—	32	—	90	3	47	6	—	—	28	—	1,754	54
19	—	91	2	133	1	117	2	273	2	54	1	2	—	71	1	6,881	127
32	—	8	—	23	—	28	—	25	—	12	—	—	—	30	—	1,406	—
1	—	—	—	6	—	3	—	2	1	—	—	—	—	3	—	174	14
47	—	50	—	170	—	142	—	117	—	75	—	3	—	80	—	5,274	1
5	—	7	—	16	—	8	—	29	—	11	—	1	—	22	—	1,016	1
15	—	17	—	38	—	43	—	42	—	14	—	—	—	28	—	1,641	1
42	—	83	—	111	—	140	—	79	—	11	—	—	—	41	—	3,761	—
4	2	6	4	6	5	12	1	1	—	—	—	—	—	1	2	321	74
41	—	98	1	113	1	118	—	171	2	26	—	—	—	141	3	6,402	46
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	1	—	2	—	—	—	—	—	—	—	2	1	138	6
—	—	—	—	—	—	2	—	6	—	1	—	—	—	—	—	210	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
868	6	1,470	15	1,727	11	1,560	10	1,691	24	479	15	18	—	1,211	13	72,081	896

Ratio per 1,000

Military Districts.	Presidency.		Allahabad.		Oudh.		Rohilkhand.		Narbudda.		Bundelkhand.	
Average Strength	2,883		1,563		5,268		3,610		1,094		2,347	
Diseases.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
GENERAL DISEASES.												
Small-pox	·3	—	2·6	—	4·9	·95	1·1	—	—	—	2·1	—
Other Eruptive Fevers	1·0	—	—	—	·6	—	3·0	·55	—	—	·9	—
Plague	—	—	—	—	—	—	—	—	—	—	—	—
Influenza	15·3	—	—	—	2·3	—	11·9	—	11·0	—	·4	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever	6·6	1·39	24·3	8·32	26·4	3·80	16·1	1·39	32·9	4·57	29·4	8·52
Other Continued Fevers	12·5	—	30·1	—	51·6	—	17·2	—	63·1	—	10·2	—
Cholera	2·8	1·73	1·3	·64	·2	—	6·9	4·71	—	—	—	—
Dysentery	29·8	·69	15·4	·64	18·8	·57	16·9	·83	26·5	—	24·7	2·56
Yellow Fever	—	—	—	—	—	—	—	—	—	—	—	—
Malarial Fevers	177·6	·35	265·5	1·28	115·4	—	99·4	—	287·0	—	332·8	—
Septic Diseases	·7	—	1·3	—	·4	·19	1·1	·28	1·8	—	·4	—
Tubercular Diseases	1·4	·35	1·9	—	1·7	·28	4·4	·28	4·6	·91	3·4	·85
Syphilis, Primary	16·6	—	14·1	—	29·2	—	36·3	—	16·5	—	9·4	—
,, Secondary	66·3	·35	37·1	·64	25·2	·38	37·7	·28	46·6	—	29·8	—
Gonorrhœa	143·6	—	142·7	—	126·0	—	108·0	—	95·1	—	148·3	—
Hydrophobia	—	—	—	—	—	—	—	—	—	—	—	—
Parasitic Diseases	28·1	—	37·1	—	10·6	—	8·0	—	11·0	—	3·8	—
Scurvy	—	—	—	—	·2	—	—	—	—	—	—	—
Alcoholism	4·9	—	·6	—	2·1	·19	1·1	—	3·7	—	5·5	·43
Rheumatism	13·9	—	18·6	·64	10·8	—	15·5	—	21·0	—	19·2	—
Debility	18·0	·35	20·5	—	16·3	·19	17·7	—	38·4	—	46·4	—
Other General Diseases	2·1	·69	12·2	·64	8·9	·19	10·2	—	5·5	·91	6·8	—
LOCAL DISEASES.												
Diseases of the—												
Nervous System (Nervous	6·2	·69	3·8	—	4·9	·38	9·4	—	3·7	·91	11·1	—
Nervous System (Mental	1·0	—	2·6	—	·9	—	—	—	2·7	—	1·3	·43
Eye	11·1	—	12·2	—	10·4	—	11·6	—	10·1	—	14·1	—
Other Organs of Special Sense	14·9	—	26·9	·64	22·6	—	14·4	—	12·8	—	26·0	—
Circulatory System	9·7	·35	14·1	·64	5·7	·38	11·4	·28	8·2	·91	16·2	1·70
Respiratory ,,	32·6	1·04	20·5	·64	24·3	1·33	19·9	·28	16·5	—	22·6	2·56
Digestive ,,	115·5	4·51	82·5	5·12	83·9	2·85	132·7	1·39	90·5	4·57	116·3	2·98
Lymphatic and Glandular System	26·4	—	21·1	—	13·7	—	12·7	—	11·0	—	29·8	—
Urinary System	2·4	·69	2·6	·64	1·5	·19	1·7	—	2·7	·91	3·0	·43
Generative System	146·0	—	88·3	—	65·5	—	63·4	—	64·0	—	126·5	—
Organs of Locomotion	13·5	—	7·7	—	13·3	—	15·2	—	15·5	—	13·6	—
Connective Tissue	20·5	—	23·7	—	22·0	—	12·2	—	12·8	—	23·0	—
Skin	46·1	—	81·3	—	86·9	—	28·5	—	43·9	—	70·3	—
INJURIES.												
General	1·7	·69	5·8	3·20	12·3	1·71	2·8	·28	3·7	1·83	12·8	·85
Local	81·5	·69	63·3	1·92	83·7	·57	61·5	—	81·4	·91	90·3	·85
In Action	—	—	—	—	—	—	—	—	—	—	—	—
POISONS	·3	—	—	—	·8	·19	·3	—	—	—	1·3	—
No appreciable disease	2·4	—	2·6	—	1·9	—	1·4	—	3·7	—	·9	—
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—	—	—	—	—	—
General Total	1073·5	14·57	1083·8	25·59	906·2	14·43	811·9	10·53	1047·5	16·45	1252·7	22·16

of mean Strength.

Meerut.		Sirhind.		Lahore.		Rawal Pindi.		Peshawar.		Madras.		Southern District.		Bangalore.		Belgaum.	
4,381		4,003		4,215		6,303		2,831		971		1,429		2,196		1,621	
Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
—	—	·5	—	·9	—	—	—	2·5	·71	—	—	—	—	—	—	—	—
—	—	3·5	—	—	—	—	—	·4	—	88·6	1·03	—	—	1·8	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	·5	—	·6	·62
1·8	—	·7	—	—	—	·6	—	—	—	17·5	—	2·1	—	1·4	—	6·8	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
28·1	6·62	35·7	6·25	6·4	1·66	17·5	3·97	26·1	7·77	7·2	3·09	8 4	—	18·7	4·13	8·6	3·70
2·3	—	11·2	—	62·4	—	9·2	—	4·2	—	5·1	—	1·4	—	10·5	—	21·0	—
—	—	2·0	1·50	3·6	2·85	1·9	1·27	1·8	1·77	—	—	—	—	—	—	—	—
16·2	·23	10·2	·25	9·0	1·42	10·3	—	9·5	·35	33·0	—	23·1	1·40	13·7	·91	12·3	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
232·1	—	200·8	·75	516·0	·71	216·4	·32	404·8	—	35·0	1·03	79·1	·70	87·9	—	368·9	—
1·1	—	·5	—	1·2	—	3·5	—	1·4	—	—	—	·7	—	—	—	—	—
2·1	·46	2·7	·25	5·2	·71	3·8	—	1·4	—	5·1	1·03	10·5	—	2·7	—	·6	—
19·6	—	31·7	—	36·1	—	25·1	—	7·4	—	44·3	—	61·6	—	24·1	—	44·4	—
49·8	·23	39·5	—	61·2	—	31·7	·16	21·9	—	48·4	—	86·8	—	77·4	—	72·2	—
96·6	—	79·4	—	96·1	—	72·0	—	41·3	—	117·4	—	119·0	—	113·8	—	111·3	—
—	—	—	—	—	—	·2	·16	—	—	—	—	—	—	—	—	—	—
11·2	—	18·0	—	10·2	—	11·9	·16	3·5	—	25·7	—	30·8	—	24·1	—	25·3	—
—	—	—	—	·2	—	—	—	—	—	—	—	—	—	—	—	—	—
1·4	·23	2·5	—	3·1	—	2·2	·16	4·2	—	3·1	—	7·0	—	1·4	—	1·9	—
18·5	—	22·0	—	14·0	—	19·8	·16	15·9	—	17·5	—	10·5	—	20·0	—	16·0	—
24·2	—	27·5	—	28·2	—	14·9	—	72·4	—	33·0	—	43·4	—	11·4	—	13·6	—
3·7	·23	5·5	—	3·8	—	6·8	—	4·2	·35	3·1	—	8·4	—	3·6	—	8·6	·62
8·4	·46	8·5	—	4·3	·24	6·2	·32	6·4	—	12·4	—	7·7	—	9·1	—	13·6	—
1·1	—	·5	—	1·7	—	2·5	—	2·5	—	1·0	—	1·4	—	—	—	1·9	—
8·9	—	6·0	—	10·7	—	10·3	—	4·2	—	11·3	—	14·0	—	7·3	—	15·4	—
15·3	—	15·2	—	12·8	—	10·2	—	11·7	—	34·0	—	23·1	—	20·0	—	16·0	—
21·2	·46	12·7	·75	18·7	·71	13·0	·95	17·7	1·41	21·6	1·03	33·6	—	11·8	—	16·7	1·23
28·8	1·60	29·5	·75	25·4	—	18·9	·32	20·5	·71	35·0	—	32·2	—	15·0	—	17·3	—
92·0	2·05	136·6	1·75	87·1	·47	103·4	1·27	62·9	1·77	103·0	4·12	133·7	1·40	92·4	1·37	125·2	1·23
19·9	—	24·0	—	13·5	—	18·6	—	8·1	—	55·6	—	30·1	—	23·2	—	27·1	—
1·8	—	3·2	—	3·6	·24	1·4	—	2·1	·71	4·1	—	4·9	·70	5·0	·46	2·5	—
54·8	—	55·5	—	51·5	—	63·3	—	33·9	—	80·3	—	53·2	—	132·5	—	75·3	·62
13·0	—	14·2	·25	13·0	—	14·1	—	14·8	—	20·6	—	33·6	—	19·6	—	25·9	—
24·0	—	27·2	·25	18·7	—	17·5	—	33·9	—	15·4	—	41·3	—	34·6	—	25·3	—
50·9	—	57·2	—	49·1	—	32·8	—	38·9	—	103·0	—	65·8	—	52·6	—	43·8	—
9·6	1·37	6·5	·75	6·4	1·66	1·4	·48	3·9	2·12	1·0	1·03	·7	·70	·9	·46	4·9	—
89·7	1·60	106·9	—	87·3	1·42	101·5	·48	75·2	—	84·4	3·09	134·4	—	114·8	·46	106·7	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
·7	·46	23·2	—	2 1	·24	5	—	1·4	·35	4·1	—	—	—	—	—	—	—
3·4	—	2·7	—	3·8	—	2·7	—	2·8	—	2·1	—	12·6	—	5·9	—	·6	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
952·1	15·98	1024·0	13·49	1267·4	12·34	866·3	10·15	964·0	18·01	1073·1	15·45	1114·8	4·90	957·7	7·74	1260·3	8·02

Ratio per 1,000 of

Military Districts.	Secunderabad.		Rangoon.		Mandalay.		Poona.		Mhow.		Bombay.	
Average Strength	3,084		975		2,563		4,264		2,685		21,89	
Diseases.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
GENERAL DISEASES.												
Small-pox	—	—	—	—	—	—	·5	—	—	—	1·8	—
Other Eruptive Fevers	3·2	—	156·9	—	23·4	—	·2	—	·4	—	1·8	—
Plague	—	—	—	—	—	—	1·4	—	1·5	·37	—	—
Influenza	—	—	3·1	—	2·3	—	1·2	—	—	—	·5	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever	10·4	2·59	9·2	2·05	7·0	3·51	20·4	5·39	65·9	11·92	7·3	1
Other Continued Fevers	17·8	—	13·3	—	16·8	—	·7	—	32·4	—	3·2	—
Cholera	—	—	—	—	·4	·39	—	—	—	—	—	—
Dysentery	18·5	·32	65·6	8·21	9·4	—	9·8	—	25·7	1·12	14·1	—
Yellow Fever	—	—	—	—	—	—	—	—	—	—	—	—
Malarial Fevers	117·4	·32	293·3	—	194·7	3·51	153·4	·23	531·5	·74	171·0	1
Septic Diseases	—	—	1·0	—	—	—	1·4	—	2·2	·74	—	·4
Tubercular Diseases	2·6	—	4·1	—	3·5	·39	4·7	·70	2·2	—	26·4	1·8
Syphilis, Primary	132·0	—	61·5	—	25·0	—	42·0	—	16·4	—	94·1	—
,, Secondary	69·4	—	105·6	—	74·9	—	58·2	·23	33·1	—	70·9	—
Gonorrhœa	121·3	—	218·5	—	99·9	—	167·2	—	102·4	—	118·2	—
Hydrophobia	—	—	—	—	—	—	—	—	—	—	—	—
Parasitic Diseases	9·4	—	65·6	—	37·1	—	16·2	—	19·0	—	71·4	—
Scurvy	—	—	—	—	—	—	—	—	1·1	—	—	—
Alcoholism	1·6	—	2·1	—	1·6	—	3·3	—	1·1	—	2·7	—
Rheumatism	13·3	—	11·3	—	19·5	—	14·5	—	8·6	—	13·6	—
Debility	9·4	—	11·3	—	12·5	—	14·5	—	23·5	—	27·3	—
Other General Diseases	2·3	·32	2·1	—	9·0	1·17	7·5	·23	11·5	—	7·7	—
LOCAL DISEASES.												
Diseases of the—												
Nervous System { Nervous ...	8·1	—	17·4	1·03	10·5	—	7·5	·23	4·8	·37	26·8	—
Nervous System { Mental ...	·6	—	2·1	—	2·3	—	·7	—	·7	—	2·3	·4
Eye	14·6	—	9·2	—	7·0	—	11·0	—	16·4	—	5·0	—
Other Organs of Special Sense ...	15·9	—	29·7	—	16·0	—	14·1	—	14·9	—	19·5	—
Circulatory System	16·5	·97	6·2	—	17·6	·39	17·8	·47	14·9	1·12	35·5	1·1
Respiratory ,, ...	25·6	·32	54·4	1·03	27·7	1·17	22·5	·47	23·8	·37	31·4	1·1
Digestive ,, ...	109·9	·32	117·9	3·08	80·8	1·56	79·0	·70	122·2	1·86	84·6	3·1
Lymphatic and Glandular System	12·0	—	42·1	—	25·8	—	30·7	—	12·7	—	26·4	—
Urinary System	2·9	·32	3·1	—	3·5	—	1·4	·23	1·9	—	6·8	—
Generative System	68·1	—	142·6	—	100·3	—	115·6	—	59·6	—	40·9	—
Organs of Locomotion	17·2	—	29·7	—	17·2	—	12·2	—	13·4	—	10·9	—
Connective Tissue	41·5	—	20·5	—	16·8	—	21·8	—	43·2	—	13·6	—
Skin	59·3	—	77·9	—	61·6	—	38·9	—	74·1	—	37·3	—
INJURIES.												
General	·6	—	1·0	—	·8	—	·5	·23	9·3	3·35	4·1	·4
Local	121·6	·97	80·0	—	78·4	—	106·7	·47	147·9	·74	67·8	·4
In Action	—	—	—	—	—	—	—	—	—	—	—	—
POISONS	·3	—	1·0	—	·4	—	·7	—	·7	—	—	—
No appreciable disease	4·9	—	8·2	—	3·9	—	3·7	—	4·1	—	3·6	—
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—	—	—	—	—	—
General Total	1048·3	6·49	1667·7	15·38	1007·4	12·10	1002·1	9·62	1443·2	22·72	1048·7	11·1

mean Strength—concluded.

Deesa.		Aden.		Sind.		Nagpur.		Quetta.		Delhi Coronation Durbar and manœuvres.		Trichinopoly Boer Guards.		Marching.		Tota
697		931		1,637		986		2,447		774		36		1,620		69,6
Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.
—	—	1·1	1·07	—	—	—	—	—	—	6·5	—	—	—	1·9	—	1·0
—	—	—	—	—	—	—	—	—	—	—	—	—	—	·6	—	5·1
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	·2
—	—	—	—	—	—	14·2	—	·8	—	—	—	—	—	—	—	2·8
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
17·2	2·87	5·4	2·15	2·4	1·22	26·4	5·07	17·2	2·45	15·5	6·46	—	—	9·9	—	19·6
1·4	—	22·6	—	1·8	·61	4·1	—	40·9	—	—	—	27·8	—	4·9	—	18·8
—	—	—	—	—	—	—	—	·8	·41	—	—	—	—	—	—	1·1
7·2	—	26·9	—	9·2	—	9·1	1·01	13·1	—	16·8	—	—	—	20·4	—	16·3
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
61·3	1·43	655·2	—	402·6	—	507·1	—	100·5	—	85·3	1·29	111·1	—	238·9	·62	244·7
—	—	—	—	—	—	—	—	1·6	—	1·3	—	—	—	1·9	—	1·1
2·9	—	1·1	—	—	—	3·0	1·01	2·9	—	3·9	—	—	—	1·2	—	3·8
38·7	—	38·7	—	23·2	—	36·5	—	4·1	—	22·0	—	—	—	13·0	—	33·5
30·3	—	30·1	—	25·7	·61	44·6	—	21·3	·41	14·2	—	111·1	—	14·2	—	46·7
66·0	—	105·3	—	108·1	—	106·5	—	51·9	—	95·6	—	55·6	—	69·8	—	107·1
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	·0
10·0	—	59·1	—	14·7	—	31·4	—	5·7	—	2·6	—	—	—	4·9	—	18·1
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	·1
4·3	—	7·5	—	·6	—	—	—	·8	—	1·3	—	—	—	—	—	2·4
10·0	—	18·3	—	7·9	—	25·4	—	22·1	—	7·8	—	—	—	9·9	—	15·9
27·3	—	14·0	—	12·2	—	34·5	—	17·6	—	2·6	—	—	—	9·3	—	22·5
4·3	—	18·3	2·15	6·7	—	14·2	—	10·6	·41	1·3	—	—	—	·6	—	6·6
10·0	—	44·0	—	6·7	—	3·0	—	4·9	·41	3·9	1·29	—	—	5·6	1·85	8·4
1·4	—	4·3	—	3·1	—	1·0	—	2·5	—	3·9	—	—	—	—	—	1·5
5·7	—	17·2	—	9·8	—	19·3	—	6·9	—	2·6	—	27·8	—	6·2	—	10·2
4·3	—	25·8	—	7·3	—	27·4	—	9·0	—	3·9	—	—	—	3·7	—	15·9
11·5	1·43	66·6	1·07	22·6	—	18·3	—	14·7	2·45	3·9	1·29	—	—	4·9	1·23	16·0
11·5	—	31·1	2·15	13·4	—	32·5	—	36·8	1·23	60·7	7·75	—	—	17·3	—	25·2
41·6	—	97·7	2·15	81·2	·61	118·7	2·03	111·6	·82	69·8	1·29	55·6	—	43·8	·62	98·8
45·9	—	8·6	—	14·0	—	28·4	—	10·2	—	15·5	—	—	—	18·5	—	20·2
1·4	—	—	—	3·7	—	3·0	—	·8	·41	—	—	—	—	1·9	—	2·5
67·4	—	53·7	—	103·3	—	144·0	—	47·8	—	96·9	—	83·3	—	49·4	—	75·8
7·2	—	7·5	—	9·8	—	8·1	—	11·9	—	14·2	—	27·8	—	13·6	—	14·6
21·5	—	18·3	—	23·2	—	43·6	—	17·2	—	18·1	—	—	—	17·3	—	23·6
60·3	—	89·2	—	67·8	—	142·0	—	32·3	—	14·2	—	—	—	25·3	—	54·0
5·7	2·87	6·4	4·30	3·7	3·05	12·2	1·01	·4	—	—	—	—	—	·6	1·23	4·6
56·8	—	105·3	1·07	69·0	·61	119·7	—	69·9	·82	33·6	—	—	—	87·0	1·85	92·0
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	·6	—	2·0	—	—	—	—	—	—	—	1·2	·62	2·0
—	—	—	—	—	—	2·0	—	2·5	—	1·3	—	—	—	—	—	3·0
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1245·3	8·61	1578·9	16·11	1055·0	6·72	1582·2	10·14	691·1	9·81	618·9	19·38	500·0	—	747·5	8·02	1035·5

ABSTRACT No. XXV.—TABLE showing the ADMISSIONS and DEATHS which took place at the CHIEF STATIONS in INDIA during the year 1903.

Districts.	Stations.	Average Annual Strength.	Admitted into Hospital.	Died in and out of Hospital.	Ratio per 1,000 of Strength.		Ratio per 1,000 of Strength, 1893 to 1902.	
					Admissions.	Deaths.	Admissions.	Deaths.
PRESIDENCY	Fort William ...	1,314	1,473	18	1121·0	13·70	1266·8	9·51
	Fort Fulta	13	10	—	769·2	—	781·9	—
	Fort Chingrikhal ...	46	28	—	608·7	—	854·8	5·48
	Dum Dum	314	378	4	1203·8	12·74	1251·9	24·26
	Barrackpore ...	225	455	7	2022·2	31·11	2229·9	38·76
	Darjeeling	369	355	6	962·1	16·26	988·2	14·40
	Lebong	602	396	7	657·8	11·63	711·6*	11·34
ALLAHABAD	Allahabad	622	606	14	977·5	22·51	1307·8	18·47
	Fort Allahabad ...	186	188	2	1010·8	10·75	1525·7	13·55
	Dinapore	563	669	22	1188·3	39·08	1469·3	16·13
	Benares	192	229	2	1192·7	10·42	1706·9	23·53
OUDH ...	Lucknow	2,471	2,111	32	854·3	12·95	1219·9	22·77
	,, Military Prison	25	20	—	800·0	—	958·8	7·78
	Fyzabad	992	919	16	926·4	16·13	1317·6	13·79
	Sitapur	636	407	5	639·9	7·86	1109·9	17·72
	Fatehgarh	156	166	1	1064·1	6·41	1369·9	14·15
	Cawnpore	968	1,151	22	1165·0	22·27	1343·1	16·08
ROHILKHAND	Bareilly	1,255	1,139	5	907·6	3·98	1255·8	10·04
	Shahjahanpur ...	532	319	1	599·6	1·88	1454·1	14·29
	Ranikhet	1,207	1,003	23	831·0	19·06	1097·0	10·42
	Chaubuttia	474	339	3	715·2	6·33	1122·6	5·65
	Naini Tal	142	131	6	922·5	42·25	1009·3	24·27
NARBUDDA	Jubbulpore	737	813	11	1103·1	14·93	1648·2	19·32
	Saugor	229	249	4	1087·3	17·47	1694·4	13·15
	Pachmarhi	128	84	3	656·3	23·44	1373·3	17·01
BUNDELKHAND	Agra	1,105	1,409	19	1275·1	17·19	1261·1	19·67
	Nowgong	286	259	6	905·6	20·98	1811·4	14·17
	Jhansi	956	1,272	27	1330·5	28·24	1611·1	23·08

* 5 years (1898–1902).

Districts.	Stations.	Average Annual Strength.	Admitted into Hospital.	Died in and out of Hospital.	Ratio per 1,000 of Strength.		Ratio per 1,000 of Strength, 1893 to 1902.	
					Admissions.	Deaths.	Admissions.	Deaths.
MEERUT ...	Meerut	1,985	1,824	39	918·9	19·65	1464·4	18·52
	Muttra	532	592	5	1112·8	9·40	1557·4	17·34
	Delhi	298	318	12	1067·1	40·27	2076·2	27·04
	Roorkee	330	329	5	997·0	15·15	986·0	13·72
	Chakrata	1,053	906	7	860·4	6·65	1075·9	8·18
	Landour	183	202	2	1103·8	10·93	1290·5	17·19
SIRHIND ...	Umballa	2,164	2,183	41	1008·8	18·95	1244·1	17·40
	Dagshai	633	757	4	1195·9	6·32	1089·2	13·37
	Solon	215	176	—	818·6	—	1272·6	12·80
	Subathu	368	269	3	731·0	8·15	1103·5	15·60
	Jutogh	237	145	2	611·8	8·44	1079·4	10·31
	Kasauli	386	569	4	1474·1	10·36	1723·6	19·85
LAHORE ...	Mian Mir	843	1,494	31	1772·2	36·77	2062·0	25·86
	Jullundur	491	507	2	1032·6	4·07	1248·2	12·73
	Ferozepore	864	1,092	4	1263·9	4·63	1911·4	17·86
	Fort Lahore... ...	112	206	2	1839·3	17·86	2284·6	34·07
	Amritsar	181	276	5	1524·9	27·62	1753·1	14·69
	Multan	825	1,042	4	1263·0	4·85	1512·9	14·45
	Dalhousie	899	725	4	806·4	4·45	1385·3	13·26
RAWAL PINDI	Rawal Pindi... ...	2,560	2,739	32	1069·9	12·50	1248·0	14·60
	Sialkot	1,195	1,088	22	910·5	18·41	1112·1	12·26
	Campbellpore ...	229	199	—	869·0	—	1338·3	13·25
	Khyra Gali	48	39	—	812·5	—	901·1	9·16
	Bara Gali	52	30	1	576·9	19·23	845·8	6·80
	Kuldana	505	330	1	653·5	1·98	1001·2	6·56
	Kalabagh	53	44	—	830·2	—	927·1	16·19
	Camp Gharial ...	277	345	1	1245·5	3·61	883·9	6·21
	,, Thobba ...	447	156	1	349·0	2·24	1076·2	7·34
	,, Lower Topa ...	106	63	—	594·3	—	1132·7	15·10
	,, Upper Topa ...	238	112	—	470·6	—	*646·9	11·24
	Khanspur	465	253	1	544·1	2·15	†481·2	10·52
	Murree	128	62	5	484·4	39·06	873·8	44·64

* 3 years (1899–1901). † 3 years (1900–1902)

Districts.	Stations.	Average Annual Strength.	Admitted into Hospital.	Died in and out of Hospital.	Ratio per 1,000 of Strength.		Ratio per 1,000 of Strength, 1893 to 1902.	
					Admissions.	Deaths.	Admissions.	Deaths.
Peshawar	Peshawar	1,625	1,980	36	1218·5	22·15	1546·0	27·46
	Nowshera	653	458	4	701·4	6·13	1456·0	16·96
	Cherat	329	164	7	498·5	21·28	1631·6	23·04
	Fort Attock	224	127	4	567·0	17·86	1419·—	19·72
Madras ...	Madras	522	659	11	1262·5	21·07	1451·—	8·82
	St. Thomas' Mt. ...	309	246	2	796·7	6·49	1192·9	13·82
	Poonamallee ...	141	137	2	971·6	14·18	1618·1	27·08
Southern District ...	Wellington	1,091	1,241	5	1137·5	4·58	1178·2	5·95
	Cannanore	106	137	1	1292·5	9·43	1631·5	13·04
	Calicut	92	86	—	956·5	—	1089·8	17·62
	Malapuram	140	127	1	907·1	7·14	1043·2	13·70
Bangalore ...	Bangalore	2,196	2,103	17	957·7	7·74	1107·6	9·23
Belgaum	Belgaum	1,100	1,160	8	1054·5	7·27	1227·9	6·85
	Bellary	511	879	5	1720·2	9·78	1338·8	10·98
	Ramandroog ...	10	4	—	400·0	—	1021·1*	—
Secunderabad ...	Secunderabad ...	3,084	3,233	20	1048·3	6·49	1184·5	12·38
Rangoon ...	Rangoon	836	1,513	15	1809·6	17·94	1392·4	12·75
	Port Blair	139	113	—	812·9	—	807·6	7·78
Mandalay	Mandalay	666	568	9	852·9	13·51	1779·6	12·61
	Shwebo	492	547	5	1111·6	10·16	1272·0	7·82
	Bhamo	239	337	4	1410·0	16·74	1435·5	7·04
	Thayetmyo	607	564	8	962·1	13·18	1301·4	7·46
	Meiktila	404	383	2	948·0	4·95	1849·6	10·99
	Maymyo	155	163	3	1051·6	19·35	—	—
Trichinopoly ...	Trichinopoly, Boer Camp.	36	18	—	500·0	—	754·6†	3·65
Poona ...	Poona	2,353	2,367	27	1005·9	11·47	1194·3	12·58
	Ahmednagar ...	910	953	6	1047·3	6·59	1157·9	13·58
	Kirkee	762	755	4	990·8	5·23	1267·2	15·25
	Satara	100	100	2	1000·0	20·00	1313·1	6·47
	Purandhur	139	98	2	705·0	14·39	1000·9	10·28

* 9 years (1893–1901). † 2 years (1901–1902).

Districts.	Stations.	Average Annual Strength.	Admitted into Hospital.	Died in and out of Hospital.	Ratio per 1,000 of Strength.		Ratio per 1,000 of Strength, 1893 to 1902.	
					Admissions.	Deaths.	Admissions.	Deaths.
Mhow ...	Mhow	1,561	2,187	28	1401·0	17·94	1531·9	15·53
	Nasirabad	673	1,072	24	1592·9	35·66	1593·5	21·51
	Neemuch	293	369	7	1259·4	23·89	2090·3	18·01
	Indore	114	155	2	1359·6	17·54	1490·3	13·82
	Taragarh	44	92	—	2090·9	—	1829·8	40·19
Bombay ...	Bombay	1,333	1,152	12	864·2	9·00	1031·4	13·06
	Deolali	822	1,106	12	1345·5	14·60	1808·8	17·73
	Khandalla	44	48	1	1090·9	22·73	1233·0	13·62
Deesa ...	Deesa	321	422	2	1314·6	6·23	1640·3	16·66
	Ahmedabad	255	280	2	1098·0	7·84	2238·2	27·28
	Mt. Abu	121	166	2	1371·9	16·53	1470·6	24·30
Aden	Aden	931	1,470	15	1578·9	16·11	1353·9	14·25
Sind ...	Karachi	1,154	1,201	6	1040·7	5·20	1658·3	10·21
	Hyderabad	483	526	5	1089·0	10·35	1482·1	10·63
Nagpur ...	Kamptee	921	1,434	10	1557·0	10·86	1236·8	11·38
	Sitabaldi	65	126	—	1938·5	—	1438·4	7·25
Quetta	Quetta	2,447	1,691	24	691·1	9·81	1241·8	16·71
Delhi Durbar ...	Delhi Coronation Durbar and manœuvres.	774	479	15	618·9	19·38	*1071·4	9·77
Marching ...	Troops on the march.	1,620	1,211	13	747·5	* 8·02	827·9	9·06

* 1 year (1902 only).

ABSTRACT No. XXVI.—TABLE showing the STATIONS in INDIA at which the ADMISSIONS and DEATHS from ENTERIC FEVER took place in each of the four quarters of the year 1903.

Districts.	Stations.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.		Total.	
		Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
Presidency	Fort William ..	1	—	1	—	1	—	—	—	3	—
	Barrackpore ..	2	—	1	—	1	—	1	1	5	1
	Darjeeling ..	3	1	—	1	—	—	—	—	3	2
	Lebong	—	—	3	—	4	1	1	—	8	1
Allahabad	Allahabad ..	—	—	5	3	2	—	—	1	7	4
	Fort Allahabad	—	—	1	1	—	—	—	—	1	1
	Dinapore ..	2	—	4	1	11	1	11	6	28	8
	Benares . ..	1	—	1	—	—	—	—	—	2	—
Oudh ..	Lucknow ..	36	3	38	3	6	2	14	4	94	12
	Fyzabad ..	2	1	18	3	—	—	—	—	20	4
	Sitapur	—	—	4	—	—	2	—	—	4	2
	Cawnpore ..	5	1	5	—	3	—	8	1	21	2
Rohilkhand	Bareilly ..	2	1	5	—	2	—	2	—	11	1
	Shahjahanpur ..	2	—	1	—	2	—	3	—	8	—
	Ranikhet ..	3	—	13	1	12	3	5	—	33	4
	Chaubuttia ..	—	—	2	—	3	—	—	—	5	—
	Naini Tal ..	—	—	—	—	1	—	—	—	1	—
Narbudda	Jubbulpore ..	2	—	8	1	20	1	1	1	31	3
	Saugor	—	—	—	—	1	—	—	—	1	—
	Pachmarhi ..	—	—	2	—	2	2	—	—	4	2
Bundelkhand	Agra	4	1	11	2	3	2	4	1	22	6
	Nowgong ..	1	—	2	2	3	—	4	1	10	3
	Jhansi	21	4	7	3	4	1	5	3	37	11

Districts.	Stations.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.		Total.	
		Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
Meerut ..	Meerut	3	4	32	7	2	2	63	10	100	23
	Muttra	1	—	—	—	—	—	1	—	2	—
	Delhi	3	1	1	1	—	—	3	1	7	3
	Roorkee ..	—	—	6	2	—	—	1	—	7	2
	Chakrata ..	1	—	2	—	1	—	1	1	5	1
	Landour ..	—	—	1	—	1	—	—	—	2	—
Sirhind ..	Umballa ..	35	4	34	11	5	2	33	4	107	21
	Dagshai ..	—	—	8	—	4	1	1	—	13	1
	Solon	—	—	3	—	—	—	—	—	3	—
	Subathu ..	—	—	2	—	—	—	—	—	2	—
	Jutogh	—	—	3	1	—	—	1	—	4	1
	Kasauli	1	—	10	2	3	—	—	—	14	2
Lahore ..	Mian Mir ..	—	—	8	3	6	1	2	1	16	5
	Ferozepore ..	1	1	—	—	1	—	2	—	4	1
	Fort Lahore ..	—	—	—	—	—	—	1	—	1	—
	Amritsar ..	—	—	2	—	—	—	1	1	3	1
	Multan	—	—	2	—	—	—	—	—	2	—
	Dalhousie ..	—	—	1	—	—	—	—	—	1	—
Rawal Pindi	Rawal Pindi ..	5	1	19	2	12	2	23	7	59	12
	Sialkot	2	1	12	—	6	6	19	5	39	12
	Campbellpore ..	—	—	—	—	1	—	—	—	1	—
	Khyra Gali ..	—	—	1	—	—	—	—	—	1	—
	Kuldana ..	—	—	1	—	2	—	—	—	3	—
	Camp Gharial ..	—	—	1	—	—	—	—	—	1	—
	„ Thobba ..	—	—	1	—	—	—	—	—	1	—
	„ Upper Topa	—	—	1	—	—	—	—	—	1	—

Districts.	Stations.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.		Total.	
		Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
Rawal Pindi (continued)	Camp Lower Topa	—	—	1	—	—	—	—	—	1	—
	Khanspur ..	—	—	1	—	1	—	—	—	2	—
	Murree	—	—	1	1	—	—	—	—	1	1
Peshawar	Peshawar ..	—	—	40	11	7	1	8	4	55	16
	Nowshera ..	—	—	—	—	6	3	2	—	8	3
	Cherat	—	—	2	—	7	3	—	—	9	3
	Fort Attock ..	—	—	1	—	—	—	1	—	2	—
Madras	Madras	3	1	2	2	—	—	1	—	6	3
	Poonamallee ..	—	—	—	—	1	—	—	—	1	—
Southern District	Wellington ..	1	—	3	—	6	—	—	—	10	—
	Calicut	—	—	1	—	—	—	—	—	1	—
	Malapuram ..	—	—	—	—	1	—	—	—	1	—
Bangalore ..	Bangalore ..	21	4	9	3	10	1	1	1	41	9
Belgaum	Belgaum ..	1	—	—	1	2	1	1	—	4	2
	Bellary	1	1	2	—	—	—	7	3	10	4
Secunderabad	Secunderabad ..	3	—	4	2	20	5	5	1	32	8
Rangoon ..	Rangoon ..	1	—	3	—	4	1	1	1	9	2
Mandalay	Mandalay ..	3	1	—	—	—	—	2	1	5	2
	Shwebo	—	—	—	—	1	1	1	1	2	2
	Bhamo	2	—	—	1	2	1	—	—	4	2
	Thayetmyo ..	—	—	—	—	3	2	1	1	4	3
	Meiktila ..	1	—	1	—	—	—	1	—	3	—

Districts.	Stations.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.		Total.	
		Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
Poona ..	Poona	3	1	5	1	49	5	17	12	74	19
	Ahmednagar ..	—	—	2	—	—	—	4	2	6	2
	Kirkee	1	—	—	—	3	—	1	—	5	—
	Satara	—	—	1	1	—	—	—	—	1	1
	Purandhur ..	1	1	—	—	—	—	—	—	1	1
Mhow ..	Mhow	21	2	35	4	13	5	6	1	75	12
	Nasirabad ..	41	4	20	10	10	2	11	—	82	16
	Neemuch ..	2	—	4	—	1	—	5	4	12	4
	Indore	1	—	1	—	2	—	2	—	6	—
	Taragarh ..	—	—	1	—	—	—	1	—	2	—
Bombay	Bombay ..	2	2	—	—	—	—	—	—	2	2
	Deolali	11	—	—	—	—	—	3	—	14	—
Deesa ..	Deesa	—	—	5	—	1	—	—	—	6	—
	Mount Abu ..	—	—	6	2	—	—	—	—	6	2
Aden	Aden	1	1	1	1	—	—	3	—	5	2
Sind ..	Karachi	1	—	—	—	1	1	1	—	3	1
	Hyderabad ..	—	—	—	—	1	1	—	—	1	1
Nagpur ..	Kamptee ..	—	—	8	—	11	2	7	3	26	5
Quetta ..	Quetta	1	—	1	1	19	3	21	2	42	6
Marching ..	Troops on the march	9	—	1	—	—	—	6	—	16	—
Delhi Durbar ..	Delhi Durbar Force	12	5	—	—	—	—	—	—	12	5
	Total ..	283	47	445	91	307	67	331	86	1366	291

ABSTRACT No. XXVII.—TABLE showing the STATIONS in INDIA at which the ADMISSIONS and DEATHS from CHOLERA took place in each of the four quarters of the year 1903.

Districts.	Stations.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.		Total.	
		Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
Presidency ..	Fort William	8	5	—	—	—	—	—	—	8	5
Allahabad ..	Dinapore ..	—	—	1	1	1	—	—	—	2	1
Oudh	Cawnpore ..	—	—	—	—	1	—	—	—	1	—
Rohilkand	Ranikhet ..	—	—	—	—	24	16	—	—	24	16
	Naini Tal ..	—	—	—	—	1	1	—	—	1	1
Sirhind ..	Umballa ..	—	—	4	3	4	3	—	—	8	6
Lahore	Mian Mir ..	—	—	13	11	—	—	—	—	13	11
	Jullundur ..	—	—	—	—	1	—	—	—	1	—
	Dalhousie ..	—	—	1	1	—	—	—	—	1	1
Rawal Pindi	Rawal Pindi..	—	—	2	2	—	—	—	—	2	2
	Sialkot ..	—	—	—	—	10	6	—	—	10	6
Peshawar ..	Peshawar ..	—	—	4	4	1	1	—	—	5	5
Mandalay ..	Shwebo ..	—	—	—	—	1	1	—	—	1	1
Quetta.. ..	Quetta ..	—	—	1	1	1	—	—	—	2	1
	Total ..	8	5	26	23	45	28	—	—	79	56

ABSTRACT No. XXVIII.—TABLE showing the PREVALENCE of DYSENTERY, DIARRHŒA, a HEPATIC DISEASES (Congestion, Inflammation, and Abscess of Liver) in each of t DISTRICTS in INDIA during the Year 1903.

Military Districts.	Strength.	Dysentery.				Diarrhœa.				Hepatic Diseases.				Total.			
		Number.		Ratio per 1,000 of Strength.		Number.		Ratio per 1,000 of Strength.		Number.		Ratio per 1,000 of Strength.		Number.		Ratio per 1,0 of Strengt	
		Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
Presidency	2,883	86	2	29·8	·69	48	—	16·6	—	79	10	27·4	3·47	213	12	73·9	4
Allahabad	1,563	24	1	15·4	·64	15	—	9·6	—	26	8	16·6	5·12	65	9	41·6	5
Oudh	5,268	99	3	18·8	·57	43	—	8·2	—	73	14	13·9	2·66	215	17	40·8	3
Rohilkhand	3,610	61	3	16·9	·83	131	—	36·3	—	46	5	12·7	1·39	238	8	65·9	2
Narbudda	1,094	29	—	26·5	—	6	—	5·5	—	21	2	19·2	1·83	56	2	51·2	1
Bundelkhand	2,347	58	6	24·7	2·56	20	—	8·5	—	43	5	18·3	2·13	121	11	51·6	4
Meerut	4,381	71	1	16·2	·23	41	—	9·4	—	64	6	14·6	1·37	176	7	40·2	1
Sirhind	4,003	41	1	10·2	·25	108	—	27·0	—	63	7	15·7	1·75	212	8	53·0	2
Lahore	4,215	38	6	9·0	1·42	49	—	11·6	—	67	1	15·9	·24	154	7	36·5	1
Rawal Pindi	6,303	65	—	10·2	—	90	—	14·3	—	58	7	9·2	1·11	213	7	33·8	1
Peshawar	2,831	27	1	9·5	·35	18	—	6·4	—	23	2	8·1	·71	68	3	24·0	1
Madras	971	32	—	33·0	—	2	—	2·1	—	26	4	26·8	4·12	60	4	61·8	4
Southern District ...	1,429	33	2	23·1	1·40	34	—	23·8	—	12	2	8·4	1·40	79	4	55·3	2
Bangalore	2,196	30	2	13·7	·91	28	—	12·7	—	13	3	5·9	1·37	71	5	32·3	2
Belgaum	1,621	20	—	12·3	—	3	—	1·9	—	15	1	9·3	·62	38	1	23·4	
Secunderabad	3,084	57	1	18·5	·32	17	—	5·5	—	62	1	20·1	·32	136	2	44·1	
Rangoon	975	64	8	65·6	8·21	35	—	35·9	—	12	3	12·3	3·08	111	11	113·8	11
Mandalay	2,563	24	—	9·4	—	23	—	9·0	—	26	3	10·1	1·17	73	3	28·5	1
Trichinopoly	36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Poona	4,264	42	—	9·8	—	47	—	11·0	—	39	2	9·1	·47	128	2	30·0	
Mhow	2,685	69	3	25·7	1·12	62	—	23·1	—	41	5	15·3	1·86	172	8	64·1	2
Bombay	2,199	31	—	14·1	—	11	—	5·0	—	60	4	27·3	1·82	102	4	46·4	1
Deesa	697	5	—	7·2	—	3	—	4·3	—	7	—	10·0	—	15	—	21·5	
Aden	931	25	—	26·9	—	13	—	14·0	—	20	1	21·5	1·07	58	1	62·3	1
Sind	1,637	15	—	9·2	—	7	—	4·3	—	23	—	14·1	—	45	—	27·5	
Nagpur	986	9	1	9·1	1·01	24	—	24·3	—	7	2	7·1	2·03	40	3	40·6	3
Quetta	2,447	32	—	13·1	—	20	—	12·3	—	62	1	25·3	·41	124	1	50·7	
Delhi Coronation Durbar and Manœuvres. Marching	774	13	—	16·8	—	6	—	7·	—	8	1	10·3	1·29	27	1	34·9	1
	1,620	33	—	20·4	—	13	—	8·0	—	4	—	2·5	—	50	—	30·9	
Total	69,613	1,133	41	16·3	·59	927	—	13·3	—	1,000	100	14·4	1·44	3,060	141	44·0	2

ABSTRACT No. XXIX.—TABLE showing the PREVALENCE and MORTALITY in INDIA, due to DYSENTERY, DIARRHŒA, and HEPATIC DISEASES (CONGESTION, INFLAMMATION and ABSCESS of the LIVER) in each Quarter of the Year 1903.

	Strength.	Dysentery.				Diarrhœa.				Hepatic Diseases.				Total.			
		Number.		Ratio per 1,000 of Strength.		Number.		Ratio per 1,000 of Strength.		Number.		Ratio per 1,000 of Strength.		Number.		Ratio per 1,000 of Strength.	
		Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
1st Quarter ..	69,373	213	4	3·1	·06	137	—	2·0	—	230	25	3·3	·36	580	29	8·4	·42
2nd ,, ..	70,463	297	8	4·2	·11	298	—	4·2	—	282	25	4·0	·35	877	33	12·4	·47
3rd ,, ..	69,800	304	16	4·4	·23	300	—	4·3	—	271	29	3·9	·42	875	45	12·5	·64
4th ,, ..	68,817	319	13	4·6	·19	192	—	2·8	—	217	21	3·2	·31	728	34	10·6	·49
Total ..	69,613	1,133	41	16·3	·59	927	—	13·3	—	1,000	100	14·4	1·44	3,060	141	44·0	2·03

ABSTRACT No. XXX.

ABSTRACT No. XXX.—TABLE showing the AVERAGE STRENGTH, ADMISSIONS the TROOPS stationed at EGYPT and CYPRUS during the Year 1903, with

Average Strength, 4,954. Diseases.	Admissions into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids. Number sent Home.	Invalids. Number finally Discharged the Service.	Average Number constantly Sick.
GENERAL DISEASES.							
Small-pox	1	1	—	1	—	—	·09
Other Eruptive Fevers	2	—	—	—	—	—	·18
Influenza	20	—	—	—	—	—	·92
Diphtheria	3	—	—	—	—	—	·26
Enteric Fever	21	4	—	4	4	—	5·24
Other Continued Fevers	343	—	—	—	—	—	9·65
Cholera	—	—	—	—	—	—	—
Dysentery	26	1	—	1	4	—	2·80
Yellow Fever	—	—	—	—	—	—	—
Malarial Fevers	23	—	—	—	—	—	·60
Septic Diseases	—	—	—	—	—	—	—
Tubercular Diseases	4	1	1	2	2	3	·85
Syphilis, Primary	41	—	—	—	—	—	3·47
,, Secondary	108	—	—	—	1	—	9·28
Gonorrhœa	743	—	—	—	2	—	52·26
Hydrophobia	—	—	—	—	—	—	—
Parasitic Diseases	51	—	—	—	4	4	1·96
Scurvy	—	—	—	—	—	—	—
Alcoholism	12	1	—	1	—	—	·37
Rheumatism	82	—	—	—	7	2	7·42
Debility	59	—	—	—	4	2	4·67
Other General Diseases	35	—	—	—	—	—	1·94
LOCAL DISEASES.							
Diseases of the—							
Nervous System (Nervous)	29	1	—	1	8	6	1·98
Nervous System (Mental)	6	—	—	—	6	1	1·87
Eye	67	—	—	—	1	1	2·84
Other Organs of Special Sense	55	—	—	—	8	6	4·79
Circulatory System	32	1	—	1	7	6	3·23
Respiratory ,,	79	1	—	1	—	—	3·38
Digestive ,,	378	2	—	2	6	—	13·35
Lymphatic ,,	41	—	—	—	—	—	6·45
Urinary ,,	8	1	—	1	—	—	·34
Generative ,,	613	—	—	—	—	—	41·55
Organs of Locomotion	64	—	—	—	5	1	5·69
Connective Tissue	152	—	—	—	—	—	5·62
Skin	195	—	—	—	1	1	9·00
INJURIES.							
General	9	5	—	5	—	—	·58
Local	365	4	—	4	2	2	16·15
In Action	—	—	—	—	—	—	—
POISONS	20	1	—	1	—	—	1·00
No appreciable disease	11	—	—	—	—	—	·41
Cause unknown (refers to deaths only)	—	—	—	—	—	—	—
General Total	3,708	24	1	25	72	35	220·39

into HOSPITAL, DEATHS, NUMBERS INVALIDED and CONSTANTLY SICK among the Ratios per 1,000 of the Strength, and the Average Ratios for 10 Years.

Ratio per 1,000.					Average Ratio per 1,000 from 1893 to 1902.				
Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.	Admissions.	Deaths.	Invalids sent Home.	Invalids finally Discharged.	Constantly Sick.
·2	·20	—	—	·02	·4	·02	—	—	·07
·4	—	—	—	·04	2·6	—	—	—	·30
4·0	—	—	—	·19	23·2	—	·01	—	·71
·6	—	—	—	·05	·4	·02	—	—	·03
4·2	·81	·81	—	1·06	23·5	5·78	7·05	·07	4·17
69·2	—	—	—	1·95	75·6	·13	2·46	·13	3·49
—	—	—	—	—	·2	·20	—	—	—
5·3	·20	·81	—	·57	19·3	·94	2·24	·18	1·46
—	—	—	—	—	—	—	—	—	—
4·6	—	—	—	·12	24·0	·02	·31	·02	·96
—	—	—	—	—	·7	·04	·02	—	·04
·8	·40	·40	·61	·17	3·6	·81	1·98	1·62	·97
8·3	—	—	—	·70	33·8	—	·07	—	3·27
21·8	—	·20	—	1·87	39·9	·07	·79	·37	4·11
150·0	—	·40	—	10·55	106·3	—	·18	·13	7·75
—	—	—	—	—	—	—	—	—	—
10·3	—	·81	·81	·40	8·6	—	·02	—	·30
—	—	—	—	—	—	—	·02	—	·01
2·4	·20	—	—	·07	2·1	·15	·02	—	·12
16·6	—	1·41	·40	1·50	23·9	·04	·94	·29	1·74
11·9	—	·81	·40	·94	17·9	—	3·34	·86	1·48
7·1	—	—	—	·39	8·3	·09	·20	·11	·61
5·9	·20	1·62	1·21	·40	8·5	·35	1·30	·97	·60
1·2	—	1·21	·20	·38	1·6	·02	1·43	1·62	·41
13·5	—	·20	·20	·57	26·6	—	·72	·57	1·44
11·1	—	1·62	1·21	·97	15·1	·02	·75	·44	·96
6·5	·20	1·41	1·21	·65	6·8	·64	1·93	2·11	·80
15·9	·20	—	—	·72	33·2	1·01	·97	·29	2·33
76·3	·40	1·21	—	2·69	111·8	1·10	1·82	·46	4·25
8·3	—	—	—	1·30	15·7	—	·22	·07	1·78
1·6	·20	—	—	·07	1·4	·07	·20	·09	·22
123·7	—	—	—	8·39	113·1	—	·33	·15	8·24
12·9	—	1·01	·20	1·15	11·1	·02	·86	·66	·80
30·7	—	—	—	1·13	25·5	—	·18	·07	1·34
39·4	—	·20	·20	1·82	45·0	—	·24	·09	2·39
1·8	1·01	—	—	·12	1·6	·99	·39	·09	·16
73·7	·81	·40	·40	3·26	79·6	·62	·81	·50	4·15
—	—	—	—	—	·1	·09	1·60	·44	·24
6·1	·20	—	—	·20	·9	·13	—	—	·03
2·2	—	—	—	·08	3·3	—	—	—	·15
—	—	—	—	—	—	—	—	—	—
748·5	5·05	14·53	7·07	44·49	915·7	13·37	33·42	12·39	61·88

ABSTRACT No. XXXI.—TABLE showing the AVERAGE STRENGTH, SHIP proceeding on and returning from Service Abroad, and from one during the Year 1903.

Strength of W.O., N.C.O., and Men:	Passage Out.		Passage Home.	
Embarked	25,102		34,338	
Average Annual Strength	1,544		2,074	
	Admitted.	Died.	Admitted.	Died.
GENERAL DISEASES.				
Small-pox	—	—	—	—
Other Eruptive Fevers	4	—	4	—
Influenza	37	—	34	—
Diphtheria	3	—	—	—
Enteric Fever	9	—	42	2
Other Continued Fevers	27	—	31	—
Cholera	—	—	—	—
Dysentery	2	—	39	—
Malarial Fevers	16	—	172	—
Septic Diseases	1	—	1	—
Tubercular Diseases	2	—	2	—
Syphilis, Primary	52	—	71	—
,, Secondary	57	—	91	—
Gonorrhœa	264	—	232	—
Hydrophobia	—	—	—	—
Parasitic Diseases	146	—	19	—
Scurvy	—	—	—	—
Alcoholism	1	—	2	—
Rheumatism	21	—	42	—
Debility	16	—	23	—
Other General Diseases	11	—	8	—
LOCAL DISEASES.				
Diseases of the—				
Nervous System { Nervous	13	—	9	—
Nervous System { Mental	—	—	3	—
Eye	24	—	14	—
Other Organs of Special Sense	20	—	21	—
Circulatory System	4	—	4	—
Respiratory ,,	59	—	149	3
Digestive ,,	219	—	215	—
Lymphatic ,,	8	—	33	—
Urinary ,,	3	1	5	—
Generative ,,	86	—	119	—
Organs of Locomotion	4	—	15	—
Connective Tissue	65	—	58	—
Skin	136	—	115	—
INJURIES.				
General	3	—	1	—
Local	155	—	150	1
In Action	—	—	—	—
POISONS	2	1	1	1
Not yet diagnosed	—	—	—	—
No appreciable disease	1	—	3	—
General Total	1,471	2	1,728	7

ADMISSIONS into HOSPITAL, and DEATHS among the TROOPS ON BOARD Colony or Station abroad to another, with the Ratios per 1,000 of the Strength,

Intercolonial.		Ratio per 1,000 of the Strength.					
14,697 / 540		Passage Out.		Passage Home.		Intercolonial.	
Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
—	—	—	—	—	—	—	—
—	—	2·6	—	1·9	—	—	—
1	—	24·0	—	16·4	—	1·8	—
—	—	1·9	—	—	—	—	—
7	—	5·8	—	20·3	·96	13·0	—
15	—	17·5	—	14·9	—	27·8	—
—	—	—	—	—	—	—	—
5	—	1 3	—	18·8	—	9·3	—
42	1	10·4	—	82·9	—	77·8	1·85
—	—	·6	—	·5	—	—	—
1	—	1·3	—	1·0	—	1·8	—
40	—	33·7	—	34·2	—	74·1	—
34	—	36·9	—	43·9	—	63·0	—
139	—	171·0	—	111·9	—	257·4	—
—	—	—	—	—	—	—	—
8	—	94·6	—	9·2	—	14·8	—
—	—	—	—	—	—	—	—
1	—	·6	—	1·0	—	1·8	—
13	—	13·6	—	20·3	—	24·1	—
4	—	10·4	—	11·1	—	7·4	—
21	—	7·1	—	3·9	—	38·9	—
—	—	8·4	—	4·3	—	—	—
1	—	—	—	1·4	—	1·8	—
12	—	15·6	—	6·8	—	22·2	—
12	—	13·0	—	10·1	—	22·2	—
1	—	2·6	—	1·9	—	1·8	—
33	2	39·2	—	71·8	1·45	61·1	3·70
57	—	141·8	—	103·7	—	105·6	—
6	—	5·2	—	15·9	—	11·1	—
1	—	1·9	·65	2·4	—	1·8	—
63	—	55·7	—	57·4	—	116·7	—
4	—	2·6	—	7·2	—	7·4	—
24	—	42·1	—	28·0	—	44·4	—
33	—	88·1	—	55·4	—	61·1	—
—	—	1·9	—	·5	—	—	—
41	—	100·4	—	72·3	·48	75·9	—
—	—	—	—	—	—	—	—
—	—	1·3	·65	·5	·48	—	—
—	—	—	—	—	—	—	—
—	—	·6	—	1·4	—		—
619	3	952·7	1·30	833·2	3·38	1,146·2	5·55

ABSTRACT No. XXXII.—On the Influence of Age on the Mortality.—Table showing the Death Rates of Warrant Officers, Non-commissioned Officers and Men, at the several Ages, arranged by quinquennial periods, in the several Commands Abroad.

Commands.	Under 20 Years.				20 and under 25.				25 and under 30.				30 and under 35.				35 and under 40.				40 and upwards.			
	Strength.	Died.	Ratio per 1,000.		Strength.	Died.	Ratio per 1,000.		Strength.	Died.	Ratio per 1,000.		Strength.	Died.	Ratio per 1,000.		Strength.	Died.	Ratio per 1,000.		Strength.	Died.	Ratio per 1,000.	
			1903.	1893-02.			1903.	1893-02.			1903.	1893-02.			1903.	1893-02.			1903.	1893-02.			1903.	1893-02.
Gibraltar	514	--	—	2·57	1,853	4	2·16	3·25	855	1	1·17	3·16	541	3	5·55	7·50	735	5	6·80	7·56	191	—	—	12·57
Malta	1,070	6	5·61	5·26	3,704	11	2·97	8·08	1,604	9	5·61	6·88	1,169	6	5·13	10·05	1,366	19	13·91	7·24	400	3	7·50	21·04
Egypt and Cyprus	503	2	3·98	7·96	2,953	14	4·74	13·08	1,077	5	4·64	13·38	291	1	3·44	12·63	106	2	18·87	20·12	24	—	—	20·12
Canada	83	—	—	2·76	373	1	2·68	2·97	354	1	2·82	3·35	491	—	—	7·06	628	3	4·78	6·83	57	—	—	9·77
Bermuda	389	—	—	1·24	1,327	6	4·52	6·87	546	1	1·83	10·61	208	1	4·81	12·54	87	—	—	6·67	20	—	—	21·50
Barbados	61	—	—	—	549	1	1·82	6·54	173	1	5·78	8·16	63	2	31·75	18·42	31	1	32·26	8·97	5	—	—	41·67
Jamaica	11	—	—	—	327	1	3·06	12·68	128	—	—	8·30	65	1	15·38	12·78	29	—	—	33·76	4	—	—	20·83
Western Africa	—	—	—	—	53	—	—	*12·74	90	2	22·22	*24·39	30	—	—	*52·63	22	1	*45·45	46·51	3	—	—	*125·00
St. Helena	95	—	—	—	212	—	—	—	62	—	—	—	20	2	100·00	—	13	—	—	—	3	—	—	—
South Africa	5,410	41	7·58	—	14,264	170	11·92	—	5,395	53	9·82	—	1,674	22	13·15	—	647	10	15·46	—	115	2	17·39	—
Mauritius	40	—	—	—	385	1	2·60	9·67	235	—	—	10·44	55	—	—	9·84	19	1	52·63	19·51	12	—	—	60·00
Ceylon	28	—	—	†5·13	711	5	7·03	†5·58	425	6	14·12	†10·73	125	2	16·00	†19·55	46	1	21·74	†22·16	12	—	—	†53·57
South China	32	—	--	12·99	621	5	8·05	10·67	380	4	10·53	11·42	114	3	26·32	13·01	57	—	—	26·04	16	—	—	38·96
Straits Settlements	33	—	—	11·45	390	4	10·26	4·72	277	6	21·66	6·58	76	1	13·16	15·09	34	—	—	8·62	3	1	333·33	—
India	2,207	20	9·06	8·74	33,039	421	12·74	17·40	23,082	304	12·84	13·00	7,193	108	15·01	14·07	1,949	30	15·39	15·23	418	13	31·10	27·56

* 6 years 1897-1902.

† 10 years 1892-99 and 1901-1902.

Note.—The particulars regarding North China are not in available form.

ABSTRACT No. XXXIII.

ABSTRACT No. XXXIII.—TABLE showing the general HEALTH STATISTICS of the various CORPS which served in the UNITED KINGDOM during the year 1903.

Battery Company or Battalion.	Corps.	Average Annual Strength.	Admitted into Hospital.	Died.	Invalided.	Average Constantly Sick.	Ratio per 1,000 of Strength.				Average Sick Time to each Soldier.	Average Duration of each Case of Sickness.	Stations occupied during the Year.	Years at Home since last return from Service Abroad.
							Admitted.	Died.	Invalided.	Average Constantly Sick.				
											days.	days.		
	HOUSEHOLD CAVALRY.													
1st	Life Guards	473	241	2	10	11·82	509·5	4·23	21·14	24·99	9·12	17·90	Windsor, 8 months; London, 4 months...	87
2nd	Life Guards	439	168	1	6	12·45	382·7	2·28	13·67	28·36	10·35	27·05	London, 8 months; Windsor, 4 months...	87
	Royal Horse Guards	424	316	1	16	12·98	745·3	2·36	37·73	30·61	11·17	14·99	London, 12 months	87
	Household Cavalry detached	1	2	—	—	·32	—	—	—	—	—	—		
	Total Household Cavalry	1,337	727	4	32	37·57	543·8	2·99	37·40	28·10	10·26	18·86		
	CAVALRY.													
1st	Dragoon Guards	62	37	1	—	1·61	596·8	16·13	—	25·97	9·48	15·88	Hounslow, 1½ months. From South Africa	—
1st	Dragoons	652	336	2	9	17·56	515·4	3·07	13·80	26·93	9·83	19·07	Shorncliffe, 12 months	1
5th	Lancers	763	487	3	28	32·16	638·3	3·93	36·70	42·15	15·38	24·10	Colchester, 12 months	1
6th	Dragoons	720	424	2	11	24·68	588·9	2·78	15·28	34·28	12·51	21·25	Curragh, 12 months...	1
7th	Hussars	34	16	—	—	·49	470·6	—	—	14·41	5·26	11·17	Kingston-on-Thames. Details	—
8th	Hussars	65	44	3	—	1·10	676·9	46·15	—	16·92	6·18	9·12	Aldershot, 1 month. From South Africa	—
11th	Hussars	281	185	1	7	11·74	658·4	3·55	24·91	41·78	15·25	23·16	Curragh, 8 months. From Egypt ...	—
13th	Hussars	773	363	1	37	21·96	469·6	1·29	47·86	28·41	10·37	22·08	Aldershot, 12 months	1

14th	Hussars	369	259	3	19	14·58	701·9	8·13	51·49	39·51	14·42	20·55	Aldershot, 8 months. From South Africa	—
16th	Lancers' Depôt	37	24	—	8	1·92	648·6	—	216·22	51·89	18·94	29·20	Ballincollig, 6 months. Formed 1.6.03 ...	—
17th	Lancers	621	519	3	17	28·50	835·7	4·83	27·37	45·89	16·75	20·04	Piershill, 12 months...	1
18th	Hussars	720	445	2	18	25·59	618·1	2·75	25·00	35·54	12·97	20·99	Aldershot and York, 12 months	1
19th	Hussars	4	6	2	—	·10	1500·0	500·00	—	25·00	9·12	6·08	... ...	—
21st	Lancers	819	560	2	15	43·35	683·8	2·44	18·32	52·93	19·32	28·25	Belfast and Dublin, 12 months	4
1st	Provisional Regiment of Dragoons ...	465	370	2	46	18·04	795·7	4·30	98·92	38·80	14·16	17·80	York and Norwich. Broken up	—
3rd	Provisional Regiment of Dragoons ...	107	124	—	2	6·40	1158·9	—	18·69	59·81	21·83	18·84	Canterbury, 4 months. Broken up ...	—
4th	Provisional Regiment of Dragoons ...	215	174	1	14	10·87	809·2	4·65	65·12	50·56	18·45	22·81	Aldershot, 4 months. Absorbed into Provisional Regiment of Dragoons.	—
1st	Provisional Regiment of Hussars ...	160	140	2	7	9·22	875·0	12·50	43·75	51·63	21·03	24·04	Curragh, 2½ months. Disbanded ...	—
2nd	Provisional Regiment of Hussars ...	248	257	2	27	19·64	1036·3	8·06	108·87	79·19	28·90	27·89	Hounslow, 9 months. Disbanded ...	—
	Provisional Regiment of Lancers ...	129	78	—	1	4·34	604·6	—	7·75	33·64	12·28	20·31	Ballincollig, 5 months. Disbanded ...	—
12th	Lancers' Depôt	39	30	—	10	2·32	769·2	—	256·41	59·49	21·71	28·23	Ballincollig, 4 months. Disbanded ...	—
	Cavalry Depôt	720	492	3	17	26·72	683·3	4·16	23·61	37·11	13·55	19·82	Canterbury, 12 months.	—
	Remount Depôt	133	67	—		4·79	503·8	—	7·52	36·01	13·14	26·09	Colchester, 7½ months; Woolwich, 4½ months.	—
	Other cavalry	174	180	2	29	27·74	1034·5	11·49	166·67	159·43	58·19	56·25	Various stations	—
	Total Cavalry of the Line ...	8,310	5,617	37	323	355·42	676·9	4·45	38·87	42·77	15·61	23·09		
	ROYAL ARTILLERY.													
Depôt.	Royal Horse Artillery	401	238	2	20	14·70	593·6	4·98	49·87	36·65	13·38	22·54	Woolwich, 12 months	Permanent.
A	Royal Horse Artillery	129	58	1	—	2·20	449·6	7·75	—	17·05	6·22	13·84	Dorchester, 12 months	3
B	Royal Horse Artillery	135	62	—	1	3·20	459·3	—	7·41	23·70	8·65	18·84	Ipswich, 12 months	1
C	Royal Horse Artillery	127	70	1	2	3·29	555·2	7·87	15·75	25·91	9·46	17·15	Ipswich, 12 months	1
M	Royal Horse Artillery	150	70	1	1	7·00	466·7	6·67	6·67	46·67	17·03	36·50	Woolwich, 12 months	2

Battery, Company, or Battalion	Corps.	Average Annual Strength.	Admitted into Hospital.	Died.	Invalided.	Average Constantly Sick.	Ratio per 1,000 of Strength.				Average Sick Time to each Soldier.	Average Duration of each Case of Sickness.	Stations occupied during the Year.	Years at Home since last return from Service Abroad.
							Admitted.	Died.	Invalided.	Average Constantly Sick.				
	ROYAL ARTILLERY—*cont.*										days.	days.		
N	Royal Horse Artillery	187	60	—	4	4·57	320·9	—	21·39	24·44	8·92	27·80	Aldershot, 11½ months. To South Africa	5
Q	Royal Horse Artillery	150	77	—	5	6·00	513·3	—	33·33	40·00	14·60	28·44	Woolwich, 12 months	2
S	Royal Horse Artillery	172	65	1	2	2·24	377·9	5·81	11·63	13·02	4·75	12·58	Aldershot, 11½ months. To South Africa	4
U	Royal Horse Artillery	139	125	—	3	7·56	899·3	—	21·58	54·39	19·85	22·08	Manchester, 12 months	1
V	Royal Horse Artillery	184	98	—	7	8·60	532·6	—	38·04	46·74	17·06	32·03	Woolwich, 12 months	3
W	Royal Horse Artillery	195	72	—	5	5·12	369·2	—	25·64	26·26	9·58	25·96	Woolwich, 12 months	3
X	Royal Horse Artillery	181	101	—	1	4·98	558·0	—	5·52	27·51	10·04	18·00	London, 12 months	3
Y	Royal Horse Artillery	174	67		4	4·20	385·1	—	22·99	24·14	8·81	22·88	Aldershot, 12 months	3
Z	Royal Horse Artillery	173	89		2	3·46	514·5	—	11·56	20·00	7·30	14·19	Newbridge, 12 months	3
AA	Royal Horse Artillery	172	100		1	4·69	581·4	—	5·81	28·43	10·38	17·85	Newbridge, 12 months	3
BB	Royal Horse Artillery	121	34		—	·84	281·0	—	—	6·94	2·53	9·02	Winchester, 12 months	3
Depôt No. 1.	Royal Field Artillery	370	262		15	20·35	708·1	2·70	40·54	55·00	20·08	28·35	Woolwich, 12 months	Permanent.
Depôt No. 2.	Royal Field Artillery	169	130	2	9	6·74	769·2	11·83	53·25	39·88	14·56	18·92	Maryhill, 12 months...	,,
Depôt No. 3.	Royal Field Artillery	230	106	—	3	4·08	460·9	—	13·04	17·74	6·48	14·05	Weedon, 12 months	,,
Depôt No. 4.	Royal Field Artillery	198	119	—	4	6·00	601·0	—	20·20	30·30	11·06	18·40	Newport (Mon.), 12 months	,,
Depôt No. 5.	Royal Field Artillery	244	115	1	2	6·14	471·3	4·10	8·20	25·16	9·18	19·49	Clonmel, 12 months; Dett, Templemore, 3 months.	,,
Depôt No. 6.	Royal Field Artillery	178	119	1	1	5·50	668·5	5·62	5·62	30·90	11·28	16·87	Seaforth, 12 months	,,

Depôt No. 7.																								Permanent.
8th	Royal Field Artillery	...	...	103	88	2	—	4·60	764·4	19·43	—	43·69	15·95	18·66	Sheffield, 12 months ...	...	...	...	1
9th	Royal Field Artillery	...	...	103	81	1	3	3·51	786·4	9·70	29·13	34·08	12·44	15·82	Sheffield, 12 months ...	...	...	...	1
10th	Royal Field Artillery	...	...	100	42	—	3	3·49	282·5	—	18·75	21·81	7·96	30·33	Aldershot, 12 months	...	...	...	5
16th	Royal Field Artillery	...	...	107	36	2	1	·66	236·4	15·69	9·35	8·22	3·00	8·92	Waterford, 12 months	...	...	...	1
17th	Royal Field Artillery	...	...	107	85	—	1	3·72	794·4	—	9·35	34·77	12·69	15·97	Sheffield, 12 months...	...	...	...	1
21st	Royal Field Artillery	...	...	105	71	—	3	5·16	676·2	—	28·57	49·14	17·94	26·53	Bradford, 12 months	...	...	...	1
22nd	Royal Field Artillery	...	...	147	61	—	7	5·20	415·0	—	47·62	35·37	12·91	31·11	Woolwich, 12 months	...	...	...	2
26th	Royal Field Artillery	...	...	143	56	1	2	2·45	391·6	6·99	13·99	17·13	6·25	15·97	Aldershot, 12 months	...	...	...	5
27th	Royal Field Artillery	...	...	93	73	—	2	2·67	734·9	—	21·51	30·86	11·26	14·35	Newbridge, 12 months	...	...	...	1
36th	Royal Field Artillery	...	...	106	79	1	3	3·83	745·3	9·43	28·30	36·13	13·19	17·70	Newbridge, 12 months	...	...	...	1
37th	Royal Field Artillery	...	...	96	61	—	—	4·47	531·3	—	—	46·56	16·99	31·99	Woolwich, 12 months	...	...	...	1
39th	Royal Field Artillery	...	...	95	61	1	2	2·11	642·1	10·53	21·05	22·21	8·11	12·63	Kilkenny, 12 months	...	...	...	1
42nd	Royal Field Artillery	...	...	115	81	—	1	6·29	704·3	—	8·69	54·70	19·97	28·34	Bradford and Leeds, 12 months	...	...	...	1
43rd	Royal Field Artillery	...	...	122	96	—	—	6·43	786·9	—	—	52·70	19·24	24·45	Newcastle, 12 months	...	...	...	1
48th	Royal Field Artillery	...	...	93	59	—	—	2·12	634·4	—	—	22·80	8·32	13·12	Fethard, 12 months ...	...	...	...	2
50th	Royal Field Artillery	...	...	124	52	1	4	4·94	419·4	8·06	32·26	39·84	14·54	34·67	Woolwich, 12 months	...	...	...	2
53rd	Royal Field Artillery	...	...	95	56	—	2	3·57	589·5	—	21·06	37·58	13·72	23·27	Bradford and Halifax, 12 months...	...	...	...	1
59th	Royal Field Artillery	...	...	160	48	1	4	3·94	300·0	6·25	25·00	24·63	8·99	29·96	Aldershot, 12 months	...	...	...	5
60th	Royal Field Artillery	...	...	88	58	1	5	2·21	659·1	11·36	86·62	25·11	9·17	13·91	Ballinrobe, 9 months; Newbridge, 3 months.	...	...	...	1
61st	Royal Field Artillery	...	...	84	38	1	1	2·43	462·4	11·90	11·90	28·93	10·56	23·34	Woolwich, 12 months	...	...	...	1
65th	Royal Field Artillery	...	...	90	52	1	3	3·59	577·8	11·11	33·33	39·89	14·56	25·20	Woolwich, 12 months; 1½ months.	Manœuvres,			1
68th	Royal Field Artillery	...	...	98	42	—	—	1·91	428·6	—	—	19·40	7·11	16·60	Limerick, 10½ months	...	...	...	1
70th	Royal Field Artillery	...	...	130	73	2	2	6·53	523·2	14·39	14·39	46·98	17·15	32·65	Woolwich, 12 months	...	...	...	2

Battery, Company or Battalion.	Corps.	Average Annual Strength.	Admitted into Hospital.	Died.	Invalided.	Average Constantly Sick.	Ratio per 1,000 of Strength.				Average Sick Time to each Soldier.	Average Duration of each Case of Sickness.	Stations occupied during the Year.	Years at Home since last return from Service Abroad.
							Admitted.	Died.	Invalided.	Average Constantly Sick.				
	ROYAL ARTILLERY—*cont.*										days.	days.		
71st	Royal Field Artillery	83	47	1	1	1·61	566·3	12·05	12·05	19·40	7·08	12·50	Clogheen, 12 months	1
86th	Royal Field Artillery	121	108	—	7	7·33	892·6	—	57·85	60·58	22·11	24·77	Newcastle, 12 months	1
87th	Royal Field Artillery	118	109	1	6	6·62	923·8	8·47	50·85	56·10	20·48	22·17	Newcastle, 12 months	1
88th	Royal Field Artillery	62	68	—	3	3·10	1096·8	—	48·39	50·00	18·25	16·64	Cork and Limerick, 12 months	1
89th	Royal Field Artillery	171	92	1	9	5·73	538·0	5·85	52·63	33·51	12·23	22·73	Aldershot and Hilsea, 12 months ...	5
90th	Royal Field Artillery	159	74	—	4	4·61	465·4	—	25·16	28·99	10·58	22·74	Aldershot and Hilsea, 12 months... ...	5
91st	Royal Field Artillery	160	115	2	4	6·70	718·8	12·50	25·00	41·88	15·29	21·27	Aldershot and Hilsea, 12 months ...	5
92nd	Royal Field Artillery	160	40	1	4	3·43	250·0	6·25	25·00	21·44	7·82	31·30	Aldershot, 12 months	5
93rd	Royal Field Artillery	156	53	—	6	4·89	339·7	—	38·46	31·35	11·44	33·68	Aldershot, 12 months	5
94th	Royal Field Artillery	153	43	—	3	3·37	281·0	—	19·61	22·03	8·04	28·61	Aldershot, 12 months	4
95th	Royal Field Artillery	147	120	—	1	7·46	816·3	—	6·80	50·75	18·52	22·69	Leeds and Aldershot, 12 months	4
96th	Royal Field Artillery	147	75	—	3	3·68	510·2	—	20·41	25·03	9·14	17·91	Birmingham and Aldershot, 12 months...	4
97th	Royal Field Artillery	116	65	1	—	2·75	560·3	8·62	—	23·71	8·65	15·44	Leeds and Aldershot, 12 months	4
98th	Royal Field Artillery	152	61	—	11	5·42	401·3	—	72·37	35·66	13·01	32·43	Aldershot, 12 months	4
99th	Royal Field Artillery	148	68	—	12	4·75	459·5	—	81·08	32·09	11·71	25·50	Aldershot, 12 months	3

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Battery, Company or Battalion.	Corps.	Average Annual Strength.	Admitted into Hospital.	Died.	Invalided.	Average Constantly Sick.	Ratio per 1,000 of Strength.				Average Sick Time to each Soldier.	Average Duration of each Case of Sickness.	Stations occupied during the Year.	Years at Home since last return from Service Abroad.
							Admitted.	Died.	Invalided.	Average Constantly Sick.				
	ROYAL ARTILLERY—*cont.*										days.	days.		
124th	Royal Field Artillery	136	54	—	2	1·85	397·1	—	14·71	13·60	4·96	12·50	Cahir, 10 months; Manœuvres, 2 months	3
125th	Royal Field Artillery	126	33	—	—	1·48	261·9	—	—	11·75	4·29	16·37	Fermoy and Cork, 12 months	3
126th	Royal Field Artillery	133	64	—	—	3·59	481·2	—	—	26·99	9·85	20·47	Limerick and Fermoy, 12 months ...	3
127th	Royal Field Artillery	104	54	—	—	2·91	519·2	—	—	27·98	10·21	19·67	Fermoy, 12 months	3
128th	Royal Field Artillery	141	73	1	5	5·66	517·7	7·09	35·46	40·14	14·65	28·30	Aldershot, 12 months	3
129th	Royal Field Artillery	142	83	1	5	4·33	584·5	7·04	35·21	30·49	11·13	19·04	Aldershot, 12 months	3
130th	Royal Field Artillery	138	69	—	1	4·39	500·0	—	7·25	31·81	11·61	23·22	Aldershot, 12 months	3
131st	Royal Field Artillery	118	69	1	1	3·62	584·7	8·47	8·47	30·68	11·20	19·15	Kildare, 12 months	3
132nd	Royal Field Artillery	118	56	—	1	4·17	474·6	—	8·47	35·34	12·90	27·18	Kildare, 12 months	3
133rd	Royal Field Artillery	148	64	—	—	2·34	432·4	—	—	15·81	5·77	13·34	Belturbet and Glen Imaal, 12 months ...	3
134th	Royal Field Artillery	132	64	—	2	2·62	484·8	—	15·15	19·85	7·24	14·94	Dundalk, 12 months	3
135th	Royal Field Artillery	127	53	1	4	2·34	417·3	7·87	31·50	18·43	6·72	16·12	Dundalk, 12 months	3
136th	Royal Field Artillery	126	46	1	—	2·10	365·1	7·94	—	16·67	6·08	16·66	Dundalk, 12 months	3
137th	Royal Field Artillery	122	101	—	—	5·57	827·9	—	—	45·66	16·67	20·13	Kildare, 12 months	3
138th	Royal Field Artillery	121	101	—	3	4·26	834·7	—	24·79	35·21	12·85	15·40	Kildare, 12 months	3
139th	Royal Field Artillery	121	78	1	2	4·18	644·6	8·26	16·53	24·55	12·61	19·56	Kildare, 12 months	3

140th	Royal Field Artillery	132	63	—	3	3·32	477·3	—	22·73	25·15	9·18	19·23	Colchester, 12 months	3
141st	Royal Field Artillery	125	53	—	—	1·77	424·0	—	—	14·16	5·17	12·19	Weedon, 12 months	3
142nd	Royal Field Artillery	128	89	1	6	5·32	695·3	7·81	46·88	41·56	15·17	21·82	Colchester, 12 months	3
143rd	Royal Field Artillery	139	94	—	3	7·67	676·2	—	21·58	55·18	20·14	29·78	Woolwich, 12 months	3
144th	Royal Field Artillery	133	125	—	10	9·50	939·8	—	75·19	71·43	26·07	27·74	Woolwich, 12 months	
145th	Royal Field Artillery	127	125	—	9	10·13	984·3	—	70·87	79·76	29·11	29·58	Woolwich, 12 months	3
146th	Royal Field Artillery	122	70	—	4	3·35	573·8	—	32·79	27·46	10·02	17·47	Salisbury Plain and Devizes, 12 months	3
147th	Royal Field Artillery	72	78	1	3	3·21	1083·3	13·89	41·67	44·58	15·27	15·02	Salisbury Plain, 12 months	3
148th	Royal Field Artillery	125	91	—	2	4·22	648·0	—	16·00	33·76	12·32	19·02	Salisbury Plain and Bristol, 12 months ...	3
149th	Royal Field Artillery	100	50	1	1	2·19	500·0	10·00	10·00	21·90	7·99	15·99	Longford and Athlone, 12 months ...	3
150th	Royal Field Artillery	104	51	—	4	3·04	490·4	—	38·46	29·23	10·67	21·76	Athlone, 12 months	3
151st	Royal Field Artillery	103	62	—	—	2·78	601 9	—	—	26·99	9·85	16·37	Athlone, 12 months	3
	Riding Establishment	148	58	1	6	3·69	391·9	6·76	40·54	24·93	9·10	23·22	Woolwich	Permanent.
Depôt.	Royal Garrison Artillery, Mountain ...	49	20	—	—	1·78	408·2	—	—	36·33	13·26	32·48	Depôt abolished, 17.6.03.	,,
Depôt.	No. 1 Royal Garrison Artillery... ...	170	119	1	5	4·41	700·0	5·88	29·41	25·94	9·47	13·53	Dover	,,
Depôt.	No. 2 Royal Garrison Artillery... ...	202	236	—	1	13·00	1168·3	—	4·95	64·36	23·49	20·11	Gosport	,,
Depôt.	No. 3 Royal Garrison Artillery... ...	190	220	1	10	18·25	1157·9	5·26	52·63	96·05	35·06	30·28	Devonport	,,
Depôt.	No. 4 Royal Garrison Artillery... ...	172	77	1	3	2·58	447·7	5·81	17·44	15·00	5·47	12·23	Seaforth	,,
Depôt.	No. 5 Royal Garrison Artillery... ...	160	85	—	—	3·60	531·3	—	—	22·50	8·21	15·46	Scarborough	,,
Depôt.	No 6 Royal Garrison Artillery... ...	143	157	—	1	8·04	1097·9	—	6·99	56·22	20·52	18·69	Great Yarmouth	,,
2	Royal Garrison Artillery	96	36	1	2	2·00	375·0	10·42	20·83	20·83	7·60	20·28	Sheerness, 11 months. To Bermuda ...	9
3	Royal Garrison Artillery	124	69	—	1	4·07	556·5	—	8·06	32·82	11·98	21·53	Pembroke Dock, 11½ months. To Bermuda.	9
4	Royal Garrison Artillery	113	80	2	5	6·16	708·0	17·70	44·25	54·51	19·90	28·10	Portsmouth, 9 months. To Gibraltar ...	—
5	Royal Garrison Artillery	110	28	1	3	1·54	254·5	9·09	27·27	14·00	5·11	20·07	Cork Harbour, 10 months. To Gibraltar.	—

Battery, Company, or Battalion.	Corps.	Average Annual Strength.	Admitted into Hospital.	Died.	Invalided.	Average Constantly Sick.	Ratio per 1,000 of Strength.				Average Sick Time to each Soldier.	Average Duration of each Case of Sickness.	Stations occupied during the Year.	Years at Home since last return from Service Abroad.
							Admitted.	Died.	Invalided.	Average Constantly Sick.				
	ARTILLERY—*cont.*										days.	days.		
6	Royal Garrison Artillery	98	93	—	2	6·35	949·0	—	20·41	64·80	23·65	24·92	Portsmouth, 9 months. To Gibraltar ...	—
7	Royal Garrison Artillery	125	80	2	2	3·84	640·0	16·00	16·00	30·72	11·21	17·52	Dover and Devonport, 12 months ...	7
8	Royal Garrison Artillery	95	35	—	—	1·48	368·4	—	—	15·58	5·69	15·43	Cork Harbour, 12 months	7
9	Royal Garrison Artillery	112	72	3	2	3·11	642·9	26·79	17·86	27·77	10·14	15·77	Shoeburyness, 12 months	—
10	Royal Garrison Artillery	135	52	1	3	2·12	385·2	7·40	22·22	15·70	5·73	14·88	Portsmouth, 12 months	—
11	Royal Garrison Artillery	134	44	—	3	2·00	328·4	—	22·39	14·93	5·45	16·59	Cork Harbour, 12 months	6
12	Royal Garrison Artillery	165	70	—	3	3·58	424·2	—	18·18	21·70	7·92	18·67	Landguard Fort, 12 months	6
13	Royal Garrison Artillery...	147	72	—	2	3·00	489·8	—	13·61	20·41	7·45	15·21	Guernsey and Alderney, 12 months ...	6
14	Royal Garrison Artillery	111	35	1	1	1·42	315·3	9·01	9·01	12·79	4·67	14·81	Sheerness, 12 months	5
15	Royal Garrison Artillery...	158	37	1	3	2·02	234·2	6·33	18·99	12·78	4·66	19·93	Londonderry, 12 months	5
16	Royal Garrison Artillery...	165	101	—	1	8·88	612·1	—	6·06	53·82	19·64	32·09	Portsmouth, 12 months	—
17	Royal Garrison Artillery...	126	43	—	1	3·00	341·3	—	7·94	23·81	8·69	25·47	Sheerness, 12 months	—
18	Royal Garrison Artillery...	112	55	1	3	3·00	491·1	8·93	26·79	26·79	9·78	19·91	Sheerness, 12 months	—
19	Royal Garrison Artillery...	131	66	1	4	3·17	503·8	7·63	30·53	24·20	8·83	17·53	Shoeburyness, 12 months	—
20	Royal Garrison Artillery...	99	49	—	—	1·77	494·9	—	—	17 88	6·53	13·18	Jersey, 12 months	5
21	Royal Garrison Artillery...	116	81	2	3	4·97	698·3	17·24	25·86	42·84	15·64	22·40	Leith Fort 12 months	5

22	Royal Garrison Artillery...	111	52	—	—	2·74	468·5	—	—	24·68	9·01	19·24	Leith Fort, 12 months. Det. at Dunbar	4
23	Royal Garrison Artillery...	186	56	1	1	3·71	301·1	5·38	5·38	19·95	7·28	24·18	Dover, 12 months	4
24	Royal Garrison Artillery...	85	57	1	5	3·03	670·6	11·76	58·82	35·65	13·01	19·40	Dover, Beverley, and Newcastle, 12 months.	—
25	Royal Garrison Artillery...	150	67	2	1	4·16	446·7	13·33	6·67	27·73	10·12	22·66	Pembroke Dock, 12 months	—
26	Royal Garrison Artillery...	110	64	—	1	2·65	581·8	—	9·09	24·09	8·79	15·11	Plymouth, Gosport, and Aldershot, 12 months.	—
27	Royal Garrison Artillery...	113	116	2	1	7·24	1026·5	17·70	8·85	64·07	23·38	22·78	Devonport and Sheerness, 12 months ...	—
28	Royal Garrison Artillery...	117	55	1	5	2·37	470·1	8·55	42·74	20·26	7·39	15·73	Weymouth, 12 months	2
29	Royal Garrison Artillery...	143	101	1	5	3·58	706·3	6·99	34·97	60·00	21·90	31·01	Devonport, 12 months	—
30	Royal Garrison Artillery...	131	56	—	1	2·60	427·5	—	7·63	19·35	7·25	16·95	Weymouth, 12 months	1
31	Royal Garrison Artillery...	129	46	—	2	1·94	310·1	—	15·50	15·04	5·49	17·70	Aldershot and Gosport, 12 months. Det. at Hilsea.	1
32	Royal Garrison Artillery...	139	80	1	6	5·40	575·5	7·19	43·17	38·85	14·18	24·64	Portsmouth, 12 months	1
33	Royal Garrison Artillery...	149	44	—	2	2·14	295·3	—	13·42	14·36	5·24	17·75	Golden Hill, 12 months	1
34	Royal Garrison Artillery...	160	89	—	2	6·88	556·3	—	12·50	43·00	15·70	28·22	Portsmouth, 12 months	1
35	Royal Garrison Artillery...	123	127	—	1	6·98	1032·5	—	8·13	56·75	20·71	20·06	Portsmouth, Gosport, and Aldershot, 12 months.	2
36	Royal Garrison Artillery...	120	84	1	2	6·00	700·0	8·33	16·67	50·00	18·25	26·07	Devonport, 12 months	1
37	Royal Garrison Artillery...	138	96	—	1	5·64	695·7	—	7·25	40·87	14·92	21·44	Portsmouth, 12 months	1
38	Royal Garrison Artillery...	148	94	1	1	4·58	635·1	6·76	6·76	30·95	11·30	17·78	Devonport, 12 months	1
39	Royal Garrison Artillery...	92	42	1	1	2·85	456·5	10·87	10·87	30·98	11·31	24·77	Devonport, 9 months. From Aden ...	—
40	Royal Garrison Artillery...	3	10	—	—	·27	3333·3	—	—	90·00	32·85	9·85	Dover, 1 month. From Sierra Leone ...	—
41	Royal Garrison Artillery...	118	84	1	3	3·42	711·9	8·47	25·42	28·98	10·58	14·86	Dover, 9 months. From Aden	—
44	Royal Garrison Artillery...	8	9	1	—	·35	1125·0	125·00	—	43·75	15·97	14·19	Pembroke Dock, 1 month. From Malta	—
105	Royal Garrison Artillery...	125	124	1	—	3·12	992·0	8·00	—	24·96	9·11	9·18	Falmouth, 12 months	1
107	Royal Garrison Artillery...	102	47	—	1	2·62	460·8	—	9·80	25·69	9·38	20·35	Dover, 8 months. From South Africa ...	—
	Regimental District Staff	831	191	10	13	12·13	229·8	12·03	15·64	14·60	5·33	23·18	Woolwich, 12 months	—

Battery, Company or Battalion.	Corps	Average Annual Strength.	Admitted into Hospital.	Died.	Invalided.	Average Constantly Sick.	Ratio per 1,000 of Strength. Admitted.	Died.	Invalided.	Average Constantly Sick.	Average Sick Time to each Soldier.	Average Duration of each Case of Sickness.	Stations occupied during the Year.	Years at Home since last return from Service Abroad.
											days.	days.		
	ARTILLERY—*cont.*													
	District Establishments	256	64	10	3	3·77	265·6	39·06	11·72	14·73	5·38	20·24	Various stations	—
	School of Gunnery	480	101	1	5	4·59	210·4	2·03	10·42	9·56	3·49	16·59	Shoeburyness	—
	Other Artillery	1,891	707	3	55	71·63	373·9	1·59	29·09	37·88	13·83	36·98	Various stations	—
	Total Royal Artillery	25,809	13,910	112	575	835·89	539·0	4·34	22·28	32·39	11·82	21·93		
	ROYAL ENGINEERS.													
	Royal Engineers	5,499	2,034	24	58	104·44	369·9	4·36	10·55	18·99	6·93	18·74	Various stations	—
	FOOT GUARDS.													
1st	Grenadier Guards...	607	333	1	40	35·79	548·6	1·65	65·90	58·96	21·52	39·23	London, 3 months; Aldershot, 9 months	5
2nd	Grenadier Guards...	752	383	1	15	44·43	509·3	1·33	19·95	59·08	21·56	42·34	London, 9 months; Aldershot, 3 months	1
3rd	Grenadier Guards...	531	396	2	19	45·61	1120·7	3·77	35·78	85·90	31·39	27·98	London, 12 months	1
Depôt.	Grenadier Guards...	264	256	—	7	9·65	1015·7	—	27·56	37·99	13·87	13·65	Caterham	Since formation.
1st	Coldstream Guards	585	279	1	29	25·50	476·9	1·71	49·57	43·59	15·91	33·36	Windsor, 2 months; Aldershot, 10 months.	1
2nd	Coldstream Guards	503	409	1	11	43·71	813·1	1·99	21·87	86·90	31·72	39·01	London, 9 months; Aldershot, 3 months	1
3rd	Coldstream Guards	636	346	1	33	36·32	544·0	1·57	51·89	57·11	20·85	38·31	London, 3 months; Aldershot, 9 months	—

Depôt.	Coldstream Guards	200	202	—	9	9·33	1010·0	—	45·00	46·65	17·03	16·86	Caterham	Since formation.
1st	Scots Guards	456	356	5	26	29·25	780·7	10·96	57·02	64·14	25·41	29·99	Windsor, 9 months; Aldershot, 3 months	1
2nd	Scots Guards	511	398	2	11	30·78	778·9	3·91	21·53	60·23	21·98	28·23	London, 12 months	1
3rd	Scots Guards	640	253	1	27	26·87	395·3	1·56	42·19	41·98	15·32	38·76	London, 3 months; Aldershot, 9 months	—
Depôt.	Scots Guards	220	183	—	9	9·32	831·8	—	40·91	42·36	15·46	18·59	Caterham	Since formation.
1st	Irish Guards	741	482	2	46	50·27	650·5	2·70	62·08	67·84	24·76	38·07	London, 3 months; Aldershot, 9 months	—
[illegible]	[illegible]rds	146	175	—	7	7·31	1198·7	—	47·95	50·07	18·28	15·25	Caterham	Since formation.
	Other Foot Guards	124	72	—	8	11·48	583·6	—	64·52	92·58	33·79	58·20	Various	—
	Total Foot Guards	6,906	4,724	17	297	415·62	684·0	2·46	43·01	60·18	21·97	32·11		
	INFANTRY.													
1st	Royal Scots	385	149	1	18	12·28	387·0	2·60	46·75	31·90	11·64	30·08	Aldershot, 8 months. From South Africa	—
2nd	East Kent Regiment	690	400	1	18	24·78	579·7	1·45	26·09	35·91	13·11	22·61	Dover, 12 months	1
1st Details	Royal Lancaster Regiment	22	14	—	—	1·02	636·4	—	—	46·36	16·92	26·59	Fleetwood, 10½ months	—
2nd	Royal Lancaster Regiment	321	110	3	11	9·67	342·7	9·35	34·27	30·12	10·99	32·09	Aldershot, 9 months. From South Africa.	—
2nd	Northumberland Fusiliers	239	172	—	1	4·66	719·7	—	4·18	19·50	7·12	9·89	Gravesend, 11 months. From South Africa.	—
4th	Northumberland Fusiliers	442	403	2	13	26·60	911·8	4·52	29·41	60·18	21·97	24·09	Dublin, 12 months	3
2nd	Royal Warwick Regiment	562	338	2	12	20·95	601·4	3·56	21·35	37·28	13·61	22·62	Devonport, 12 months	1
4th	Royal Warwick Regiment	634	606	4	14	35·49	955·8	6·31	22·08	55·98	20·43	21·37	Dublin, 12 months	3
2nd	Royal Fusiliers	623	267	1	21	13·60	428·6	1·61	33·71	21·83	7·97	18·59	Aldershot, 12 months	1
4th	Royal Fusiliers	605	314	—	15	21·08	519·0	—	24·79	34·86	12·72	24·55	Woolwich, 12 months	3
2nd	Liverpool Regiment	651	383	3	17	21·35	588·3	4·61	26·11	32·80	11·97	20·35	Limerick, 11 months; Manœuvres, 1 month.	11
2nd	Norfolk Regiment...	685	277	3	14	18·39	404·4	4·38	20·44	26·85	9·80	24·23	Colchester, 10½ months. From South Africa.	—
Details	Lincoln Regiment...	61	44	—	5	2·49	721·3	—	81·97	40·82	14·90	20·66	Colchester, 12 months	—

Battery, Company or Battalion.	Corps.	Average Annual Strength.	Admitted into Hospital.	Died.	Invalided.	Average Constantly Sick.	Ratio per 1,000 of Strength.				Average Sick Time to each Soldier.	Average Duration of each Case of Sickness.	Stations occupied during the Year.	Years at Home since last return from Service Abroad.
							Admitted.	Died.	Invalided.	Average Constantly Sick.				
	INFANTRY—*cont.*										days.	days.		
2nd	Devonshire Regiment	334	147	1	10	10·38	440·1	2·99	29·94	31·08	11·34	25·77	Aldershot, 6½ months. From South Africa.	—
1st	Suffolk Regiment	809	378	—	20	25·36	467·2	—	24·72	31·35	11·44	24·49	Colchester, 12 months	1
2nd	Somersetshire Light Infantry	437	202	—	8	14·84	462·2	—	18·31	33·96	12·40	26·81	Aldershot, 7 months. From South Africa.	—
2nd	East Yorkshire Regiment	617	339	2	32	25·78	549·4	3·24	51·86	41·78	15·25	27·76	Aldershot, 12 months	1
2nd	Bedford Regiment	414	270	—	12	15·47	652·2	—	28·99	37·37	13·64	20·91	Colchester, 9½ months. From South Africa.	—
2nd	Leicestershire Regiment	768	290	3	6	13·87	377·6	3·91	7·81	18·06	6·59	17·46	Guernsey and Alderney, 12 months ...	1
2nd	Royal Irish Regiment	364	248	2	10	13·38	681·3	5·49	27·47	36·76	13·42	19·69	Fermoy, 9½ months; Dets. at Cork Harbour and Kilworth. From India.	—
1st	Yorkshire Regiment	611	390	2	7	17·27	638·3	3·27	11·46	28·27	10·32	16·16	Sheffield, York and Salisbury Plain. 12 months.	1
2nd	Lancashire Fusiliers	429	254	2	21	14·68	592·1	4·66	48·95	34·22	12·49	21·10	Aldershot, 12 months	1
4th	Lancashire Fusiliers	558	322	—	9	18·48	577·1	—	16·13	33·12	12·09	20·95	Curragh, 12 months	3
2nd	Royal Scots Fusiliers	567	273	2	9	10·78	481·5	3·53	15·87	19·01	6·94	14·41	Aldershot, 10 months. From South Africa.	—
2nd	Cheshire Regiment	356	339	2	27	16·58	952·2	5·62	75·84	46·57	17·00	17·85	Aldershot, 12 months	1
1st	Royal Welsh Fusiliers	563	353	5	22	14·60	627·0	8·88	39·08	25·93	9·46	15·10	Lichfield, 10 months. From South Africa.	1
1st	King's Own Scottish Borderers... ...	543	442	4	7	24·62	814·0	7·37	12·89	45·34	16·55	20·33	Belfast, 10½ months. From South Africa.	—
1st	Royal Inniskilling Fusiliers	525	247	7	13	13·95	470·5	13·33	24·76	26·57	9·70	20·61	Londonderry, 10½ months. From South Africa.	—
1st	Worcestershire Regiment	279	167	1	4	7·08	598·6	3·58	14·34	25·38	9·26	15·47	Templemore, 9 months. Dets. at Cork Harbour and Kilworth. From South Africa.	—

3rd	Worcestershire Regiment	481	203		9	11·39	471·0	—	20·68	26·43	9·65	20·49	Tipperary, 12 months	3
1st	East Lancashire Regiment	990	931		15	58·27	1349·3	1·45	21·74	34·45	20·82	22·84	Dublin, 12 months	1
1st	East Surrey Regiment	616	264	4	22	14·27	428·6	6·49	35·71	23·17	8·46	19·73	Aldershot, 11½ months. From South Africa.	1
2nd	Duke of Cornwall's Light Infantry ...	380	276		24	17·89	726·3	2·63	63·16	46·29	16·90	23·26	Devonport, 10½ months. From South Africa.	—
1st	West Riding Regiment	841	222		15	11·50	410·4	1·85	27·73	21·26	7·76	18·91	York, 12 months	1
1st	Border Regiment	566	492		22	38·63	891·7	1·79	39·43	69·59	25·40	28·81	Devonport, 12 months	1
2nd	Royal Sussex Regiment	721	390	3	9	18·78	540·9	4·16	12·48	26·05	9·51	17·58	Shorncliffe, 12 months	1
2nd	Hampshire Regiment	866	506	3	28	30·28	910·1	5·40	50·36	55·54	20·27	22·27	Portsmouth. To Malta, 9.8.03. Dets., 12 months.	—
2nd	Dorsetshire Regiment	467	241	1	12	10·69	516·1	2·14	25·70	22·89	8·35	16·19	Portland, 12 months	1
2nd	South Lancashire Regiment	555	446	3	29	23·88	803·6	5·41	52·25	42·49	15·51	19·30	Dover and Shorncliffe, 12 months ...	—
1st	Royal Highlanders	759	374	1	22	21·80	492·8	1·32	28·99	28·72	10·48	21·28	Edinburgh, 12 months	1
1st	Oxfordshire Light Infantry	501	388	2	26	22·23	774·5	3·99	51·90	44·37	16·20	20·91	Chatham, 8½ months. To India	—
2nd	Oxfordshire Light Infantry	105	40			2·42	381·0	—	—	23·05	8·41	22·08	Chatham, 1½ months. From India ...	—
2nd	Essex Regiment	768	487		10	29·52	634·4	1·30	13·02	38·44	14·03	22·12	Warley, 12 months	1
2nd	Nottinghamshire and Derbyshire Regiment.	643	416		19	16·38	647·0	1·56	29·55	25·47	9·30	14·37	Parkhurst and Salisbury Plain, 12 months.	1
1st	Loyal North Lancashire Regiment ...	548	470	3	16	38·26	857·7	5·47	29·20	69·82	25·48	29·71	Devonport and Salisbury Plain, 12 months.	1
1st	Royal Berkshire Regiment	550	351	3	8	17·51	638·2	5·45	14·55	31·64	11·62	18·21	Woking, 12 months...	1
1st	Royal West Kent Regiment	730	464	2	16	22·04	635·6	2·74	21·92	30·19	11·02	17·34	Shorncliffe, 12 months	1
1st	Yorkshire Light Infantry	411	199	2	10	8·34	484·2	4·87	24·33	20·29	7·41	15·30	Aldershot, 12 months	16
1st	Shropshire Light Infantry	486	265		4	10·61	545·3	10·29	8·23	21·83	7·97	14·61	Pembroke Dock, 9½ months. From India.	—
2nd	Middlesex Regiment	293	115		4	4·39	392·5	3·41	13·65	14·98	5·47	13·93	Hounslow, 10½ months. From South Africa.	—
4th	Middlesex Regiment	529	493		9	29·66	931·9	1·89	17·01	56·07	20·47	21·97	Dublin, 12 months.	3
3rd	King's Royal Rifle Corps	624	409		66	25·18	655·4	1·60	105·77	40·35	14·73	22·47	Cork, 9 months. Dets. at Cork Harbour and Kilworth. From South Africa.	—

Battery, Company, or Battalion.	Corps.	Average Annual Strength.	Admitted into Hospital.	Died.	Invalided.	Average Constantly Sick.	Ratio per 1,000 of Strength. Admitted.	Died.	Invalided.	Average Constantly Sick.	Average Sick Time to each Soldier.	Average Duration of each Case of Sickness.	Stations occupied during the Year.	Years at Home since last return from Service Abroad.
	INFANTRY—*cont.*										days.	days.		
2nd	Wiltshire Regiment	297	174	—	10	12·80	585·9	—	33·67	43·10	15·73	26·85	Aldershot, 7 months. From South Africa.	—
2nd	Manchester Regiment	389	214	—	4	9·50	550·3	—	10·28	24·42	8·91	16·20	Aldershot, 12 months	1
4th	Manchester Regiment	460	387	—	32	23·21	841·3	—	69·56	50·46	18·42	21·89	Cork, 11 months; Manœuvres, 1 month. Dets. at Cork Harbour.	3
1st	North Staffordshire Regiment	65	44	1	2	1·32	676·9	15·38	30·77	20·31	7·41	10·95	Lichfield, 1 month. From India... ...	
2nd	North Staffordshire Regiment	407	204	1	13	9·55	501·2	2·46	31·94	23·46	8·56	17·09	Lichfield, 9 months. To India	1
2nd	York and Lancaster Regiment	438	312	1	14	15·66	712·3	2·28	31·96	35·75	13·05	18·33	Dover, 12 months	1
2nd	Durham Light Infantry	605	307	—	9	16·63	507·4	—	14·88	27·49	10·03	19·77	Aldershot, 12 months	1
2nd	Highland Light Infantry	546	320	1	5	14·11	586·1	1·83	9·16	25·84	9·43	16·09	Jersey, 12 months	3
2nd	Seaforth Highlanders	584	490	—	7	28·09	839·0	—	11·99	48·10	17·56	20·92	Dublin, 10½ months From South Africa	
1st	Gordon Highlanders	586	480	2	13	24·08	819·1	3·41	22·18	41·09	15·00	18·31	Maryhill, 12 months. Det. at Aberdeen	1
1st	Cameron Highlanders	714	277	4	22	13·45	388·0	5·60	30·81	18·84	6·88	17·72	Fort George, 12 months	1
2nd	Royal Irish Rifles	502	577	3	9	30·56	1149·4	5·98	17·93	60·88	22·22	19·33	Dublin, 11 months. From South Africa	
1st	Royal Irish Fusiliers	688	588	1	16	38·64	893·6	1·52	24·32	58·72	21·43	23·99	Holywood and Belfast, 12 months	1
1st	Connaught Rangers	578	413	3	—	16·04	714·5	5·19	—	27·75	10·13	14·18	Mullingar, 11 months. From South Africa.	
1st	Argyll and Sutherland Highlanders ...	424	290	1	29	17·76	684·0	2·36	68·40	41·89	15·29	22·36	Aldershot, 7 months. From South Africa.	
1st	Leinster Regiment	424	201	3	9	11·15	474·1	7·08	21·23	26·30	9·60	20·25	Fermoy, 11 months Manœuvres, 1 month. Det. Kilworth.	1

2nd	Royal Munster Fusiliers...	750	262	—	20	13·21	349·3	—	26·67	17·61	6·43	18·40	Kinsale and Cork Harbour, 11 months; Manœuvres, 1 month.	2
2nd	Royal Dublin Fusiliers	372	194	2	8	12·89	521·5	5·38	21·51	34·65	12·65	24·25	Buttevant, 3 months. From Aden ...	—
1st	Rifle Brigade	774	673	3	33	42·79	870·5	3·88	42·64	55·28	20·18	23·21	Portsmouth, 12 months	1
4th	Rifle Brigade	577	275	1	12	19·47	476·6	1·73	20·80	33·74	12·32	25·84	Chatham, 12 months	- -
1st	Provisional Battalion	309	354	2	34	17·08	1145·6	6·47	110·03	55·28	20·18	17·61	Shorncliffe and Dover	—
4th	Provisional Battalion	79	47	—	8	2·88	594·9	—	101·27	36·46	13·31	22·36	Fleetwood and Lichfield, 9 months. Broken up.	—
8th	Provisional Battalion	65	117	1	—	6·42	1800·0	15·38	—	98·77	36·05	20·03	Holywood, 1½ months. Absorbed ...	—
9th	Provisional Battalion	51	46	—	3	1·84	902·0	—	58·82	36·08	13·17	14·60	Colchester, 1½ months. Absorbed by units.	—
12th	Provisional Battalion	41	41	—	1	2·27	1000·0	—	24·39	55·37	20·21	20·21	Chatham and Gravesend, 1 month. Absorbed.	—
13th	Provisional Battalion	31	47	—	—	·40	1516·1	—	—	12·90	4·71	3·11	Mullingar, 1 month. Absorbed	—
	Royal Garrison Regiment	175	42	2	—	2·50	240·0	11·43	—	14·29	5·22	21·73	Portsdown Hill	—
	Mounted Infantry...	850	524	3	5	20·85	628·2	3·53	5·88	24·53	8·95	14·25	Various	—
	Other Infantry	1,165	1,419	7	172	159·44	1218·0	6·01	147·64	136·86	49·95	41·01	Various	—
	On Manœuvres	512	543	—	7	16·42	1060·5	—	13·67	32·97	11·71	11·04		
	Total Infantry Regiments ...	39,984	26,452	136	1,268	1554·61	661·6	3·40	31·71	38·88	14·19	21·45		
	REGIMENTAL DEPÔTS.													
Depôt	Royal Scots...	166	111	—	3	4·72	668·7	—	18·07	28·43	10·38	15·52	Glencorse	Since formation.
,,	West Surrey Regiment	166	143	—	3	4·36	861·4	—	18·07	26·27	9·59	11·13	Guildford	,,
,,	East Kent Regiment	185	177	3	1	7·31	956·8	16·22	5·41	39·51	14·42	15·07	Canterbury	,,
,,	Lancaster Regiment	236	98	—	1	3·44	415·3	—	4·24	14·58	5·32	12·82	Lancaster	,,
,,	Northumberland Fusiliers	138	142	1	8	8·18	1029·0	7·25	57·97	59·28	21·64	21·03	Newcastle	,,
,,	Warwickshire Regiment...	213	102	—	2	4·56	478·9	—	9·39	21·41	7·81	16·32	Warwick	,,
,,	Royal Fusiliers	245	110	1	5	5·14	449·0	4·08	20·41	20·98	7·66	17·06	Hounslow	,,

Battery, Company, or Battalion.	Corps.	Average Annual Strength.	Admitted into Hospital.	Died.	Invalided.	Average Constantly Sick.	Ratio per 1,000 of Strength.				Average Sick Time to each Soldier.	Average Duration of each Case of Sickness.	Stations occupied during the Year.	Years at Home since last return from Service Abroad.
							Admitted.	Died.	Invalided.	Average Constantly Sick.				
	REGIMENTAL DEPÔTS—*cont.*										days.	days.		
Depôt.	Liverpool Regiment	154	38		2	1·48	246·8	—	12·99	9·61	3·51	14·22	Warrington	Since formation.
,,	Norfolk Regiment...	202	95			4·09	470·3	—	—	20·25	7·39	15·72	Norwich	,,
,,	Lincolnshire Regiment	162	102		6	4·32	629·6	—	37·04	26·67	9·73	15·46	Lincoln	,,
,,	Devonshire Regiment	165	90		2	2·80	545·5	—	12·12	16·97	6·19	11·36	Exeter	,,
,,	Suffolk Regiment	180	108			4·05	600·0	5·56	—	22·50	8·21	13·69	Bury St. Edmunds	,,
,,	Somersetshire Light Infantry	175	106	2		3·61	605·7	11·43	—	20·63	7·53	12·43	Taunton	,,
,,	West Yorkshire Regiment	217	158	2	16	6·20	728·1	9·22	73·73	28·57	10·43	14·32	York	,,
,,	East Yorkshire Regiment	169	187	—	5	4·12	1106·5	—	29·59	24·38	8·90	8·05	Beverley	,,
,,	Bedfordshire Regiment	173	117	—	2	3·97	676·3	—	11·56	22·96	8·38	12·38	Bedford	,,
,,	Leicestershire Regiment	200	117	—	1	4·28	585·0	—	5·00	21·40	7·81	13·35	Leicester	,,
,,	Royal Irish Regiment	145	91		2	3·84	627·0	—	13·79	26·48	9·67	15·40	Clonmel	,,
,,	Yorkshire Regiment	176	26		—	1·53	147·7	5·68	—	8·69	3·17	21·48	Richmond	,,
,,	Lancashire Fusiliers	235	53		—	2·13	225·5	—	—	9·06	3·31	14·67	Bury	,,
,,	Royal Scots Fusiliers	174	141		4	6·38	810·3	5·75	22·99	36·67	13·39	16·52	Ayr	,,
,,	Cheshire Regiment	173	59		—	3·96	341·0	5·78	—	22·99	8·35	24·50	Chester	,,
,,	Royal Welsh Fusiliers	171	143	3	6	5·12	836·3	17·54	35·09	29·94	10·93	13·07	Wrexham	,,

,,	South Wales Borderers	168	70	4	—	2·68	416·7	23·81	—	15·95	5·82	13·97	Brecon	,,
,,	King's Own Scottish Borderers	131	68	2	1	2·92	519·1	15·27	7·63	22·29	8·14	15·67	Berwick-on-Tweed	,,
,,	Cameronians	146	36	—	—	2·25	260·3	—	—	15·41	5·62	21·61	Hamilton	,,
,,	Royal Inniskilling Fusiliers	192	70	2	2	2·97	364·6	10·42	10·42	15·47	5·65	15·49	Omagh	,,
,,	Gloucestershire Regiment	202	130	1	1	3·70	643·6	4·95	4·95	18·32	6·69	10·29	Bristol	,,
,,	Worcestershire Regiment	132	89	1	—	1·42	295·5	7·58	—	10·76	3·93	13·29	Worcester	,,
,,	East Lancashire Regiment	140	97	1	—	4·58	692·9	7·14	—	32·71	11·94	17·23	Preston	,,
,,	East Surrey Regiment	348	92	—	—	3·67	371·0	—	—	14·79	5·40	14·56	Kingston-on-Thames	,,
,,	Duke of Cornwall's Light Infantry ...	209	121	2	1	4·94	578·9	9·57	4·78	23·61	8·63	14·91	Bodmin	,,
,,	West Riding Regiment	123	168	—	1	6·00	1365·8	—	8·13	48·78	17·80	13·04	Halifax	,,
,,	Border Regiment	137	82	5	3	3·73	598·5	36·50	21·90	27·23	9·94	16·60	Carlisle	,,
,,	Royal Sussex Regiment	158	95	1	—	2·72	601·3	6·33	—	17·22	6·29	10·45	Chichester	,,
,,	Hampshire Regiment	216	99	1	1	2·78	458·3	4·63	4·63	12·87	4·70	10·25	Winchester	,,
,,	South Staffordshire Regiment	134	84	—	5	3·13	626·9	—	37·31	23·36	8·53	13·60	Lichfield	,,
,,	Dorsetshire Regiment	187	132	—	3	4·64	705·9	—	16·04	24·81	9·06	12·83	Dorchester	,,
,,	South Lancashire Regiment	145	63	—	2	2·83	434·5	—	13·79	19·52	7·12	16·40	Warrington	,,
,,	Welsh Regiment	115	98	1	3	4·06	852·2	8·70	26·09	35·48	12·95	15·19	Cardiff	,,
,,	Royal Highlanders	161	120	—	8	5·59	745·3	—	49·70	34·72	12·67	17·00	Perth	,,
,,	Oxfordshire Light Infantry	196	80	2	2	4·15	408·2	10·20	10·20	21·17	7·73	18·93	Oxford	,,
,,	Essex Regiment	217	154	2	—	8·16	709·7	9·22	—	37·60	13·72	19·34	Warley	,,
,,	Nottinghamshire and Derbyshire Regiment	179	73	—	2	2·87	407·8	—	11·17	16·03	5·85	14·35	Derby	,,
,,	Loyal North Lancashire Regiment ...	173	112	—	7	4·92	647·4	—	40·46	28·44	10·38	16·03	Preston	,,
,,	Northamptonshire Regiment	229	86	2	1	2·46	375·5	8·73	4·37	10·74	3·92	10·44	Northampton	,,
,,	Royal Berkshire Regiment	228	181	—	2	6·61	800·9	—	8·85	29·25	10·67	13·33	Reading	,,

Battery, Company, or Battalion.	Corps.	Average Annual Strength.	Admitted into Hospital.	Died.	Invalided.	Average Constantly Sick.	Ratio per 1,000 of Strength.				Average Sick Time to each Soldier.	Average Duration of each Case of Sickness.	Stations occupied during the year.	Years at Home since last return from Service abroad.
							Admitted.	Died.	Invalided.	Average Constantly Sick.				
	REGIMENTAL DEPÔTS—*cont.*										days.	days.		
Depôt	Royal West Kent Regiment	191	128	1	3	3·48	670·2	5·24	15·71	18·22	6·65	9·92	Maidstone	Since formation.
,,	Yorkshire Light Infantry	215	170	—	7	7·72	790·7	—	32·56	35·91	13·11	16·58	Pontefract	,,
,,	Shropshire Light Infantry	164	128	1	2	4·51	780·5	6·10	12·20	27·50	10·04	12·86	Shrewsbury	,,
,,	Middlesex Regiment	209	121	2	4	6·03	578·9	9·57	19·14	21·85	10·53	18·19	Hounslow	,,
,,	Wiltshire Regiment	134	81	2	2	4·62	604·5	14·93	14·93	34·48	12·59	20·82	Devizes	,,
,,	Manchester Regiment	161	48	—	4	2·64	298·1	—	24·84	16·40	5·99	20·06	Ashton-under-Lyne	,,
,,	North Staffordshire Regiment	125	66	3	2	2·41	528·0	24·00	16·00	19·28	7·04	13·33	Lichfield	,,
,,	York and Lancaster Regiment	185	113	—	6	5·58	610·8	—	32·43	30·16	11·01	18·02	Pontefract	,,
,,	Durham Light Infantry	157	106	1	2	4·66	675·2	6·37	12·74	29·68	10·83	16·05	Newcastle	,,
,,	Highland Light Infantry	161	66	1	2	2·70	409·9	6·21	12·42	16·77	6·12	14·93	Hamilton	,,
,,	Seaforth Highlanders	172	78	2	5	3·53	453·5	11·63	29·07	20·52	7·49	16·52	Fort George	,,
,,	Gordon Highlanders	131	69	2	2	3·12	526·7	15·27	15·27	23·82	8·69	16·50	Aberdeen	,,
,,	Cameron Highlanders	139	44	—	5	2·36	316·5	—	35·97	16·98	6·20	19·58	Inverness	,,
,,	Royal Irish Rifles	225	194	2	7	8·80	862·2	8·89	31·11	39·11	14·28	16·56	Belfast	,,
,,	Royal Irish Fusiliers	178	73	—	—	3·18	410·1	—	—	17·87	6·52	15·90	Armagh	,,
,,	Connaught Rangers	209	80	2	—	3·08	382·8	9·57	—	14·74	5·38	14·05	Galway	,,

"	Argyll and Sutherland Highlanders ...	214	106	3	6	4·07	495·3	14·02	28·04	19·02	6·94	14·01	Stirling	"
"	Leinster Regiment	228	165	2	3	7·11	723·7	8·77	13·16	31·18	11·38	15·73	Birr	"
"	Royal Munster Fusiliers	147	88	—	2	4·00	598·6	—	13·61	27·21	9·93	16·59	Tralee	"
"	Royal Dublin Fusiliers	201	54	1	5	3·45	268·7	4·98	24·88	17·16	6·26	23·32	Naas	"
"	The Rifle Depôt	646	419	2	8	29·16	648·6	3·10	12·38	45·14	16·48	25·40	Gosport	
"	Royal Garrison Regiment	338	153	9	14	12·06	452·6	26·63	41·42	35·68	13·02	28·77	Hilsea, 10½ months; Aldershot, months.	
	Detached	—	10	—	—	·33	—	—	—	—	—	12·05	Various.	
	Total Regimental Depôts ...	12,914	7,426	79	205	321·99	575·0	6·12	15·87	24·93	9·10	15 83		
	Garrison Staff and Departments ...	9,763	3,956	36	125	261·93	405·2	3·69	12·80	26·83	9·79	24·17	Various.	
	Militia	39	35	1	—	2·33	897·4	25·64	—	59·74	21·81	24·30	Various.	
	Yeomanry	4	11	5	5	5·40	—	—	—	—	—	—	Various.	

ABSTRACT No. XXXIV.—Table, taken from the Reports of the Principal Medical Officers, showing general Health Statistics of the various Corps which served in the different Commands Abroad during the Year 1903.

Battery, Company, or Batrn.	Corps and Commands.	Average Annual Strength.	Admitted into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids sent Home.	Average Number Constantly Sick.	Ratio per 1,000 of Strength. Admitted.	Died.	Invalided.	Constantly Sick.	Sick Time to each Soldier.	Duration of each Case of Sickness.	Stations occupied during the Year.	Completed Years of Service in the Command.
													days.	days.		
	GIBRALTAR.															
	Royal Artillery.															
1st	Royal Garrison Artillery ...	205	58	—	—	—	4	4·83	282·9	—	19·51	23·56	8·60	30·40	Gibraltar, 12 months	1
4th	Royal Garrison Artillery ...	33	16	1	—	1	—	·73	484·9	30·30	—	22·12	8·07	16·65	From England, 10th November... ...	—
5th	Royal Garrison Artillery ...	33	12	—	—	—	—	·80	363·6	—	—	24·24	8·85	24·33	From England, 10th November	—
6th	Royal Garrison Artillery ...	30	21	—	—	—	—	1·36	700·0	—	—	45·33	16·55	23·64	From England, 10th November	—
46th	Royal Garrison Artillery ...	183	69	—	1	1	4	3·69	377·0	5·46	21·86	20·16	7·36	19·52	To Sierra Leone, 10th November ...	—
49th	Royal Garrison Artillery ...	254	106	—	1	1	12	10·51	417·3	3·94	47·24	41·38	15·10	36·19	Gibraltar, 12 months	1
50th	Royal Garrison Artillery ...	242	133	2	—	2	5	10·57	549·6	8·26	20·66	43·68	15·94	29·01	Gibraltar, 12 months	1
99th	Royal Garrison Artillery ...	171	119	1	1	2	7	9·04	695·9	11·70	40·94	52·87	19·30	27·73	To Malta, 10th November...	—
100th	Royal Garrison Artillery ...	186	78	—	1	1	3	4·89	419·4	5·38	16·13	26·29	9·60	22·88	To Malta, 10th November...	—
102nd	Royal Garrison Artillery ...	194	109	1	—	1	4	8·33	561·9	5·15	20·62	42·94	15·67	27·89	Gibraltar, 12 months	1
	Total	1,531	721	5	4	9	39	54·75	470·9	5·88	25·47	35·76	13·05	27·72		
	Royal Engineers.	410	137	1	—	1	2	9·89	334·2	2·44	4·88	24·12	8·80	26·35	Gibraltar, 12 months	Various

	Infantry Regiments.															
1st	Lancashire Fusiliers	724	349	—	—	—	17	25·79	482·0	—	23·48	35·62	13·00	26·97	Gibraltar, 12 months	1
2nd	Loyal North Lancashire Regiment	797	373	1	—	1	12	24·69	468·0	1·25	15·06	20·98	11·31	24·16	Gibraltar, 12 months	1
2nd	Royal Garrison Regiment ...	998	217	5	1	6	23	18·96	217·4	6·01	23·05	19·00	6·93	31·89	Gibraltar, 12 months	2
	Other Infantry	1	—	—	1	1	—	·84	—	—	—	—	—	—	—	—
	Total	2,520	939	6	2	8	52	70·28	372·6	3·17	20·63	27·89	10·18	27·32		
	Garrison Staff and Departments.															
	Army Service Corps	69	22	1	—	1	—	1·49	318·8	14·49	—	21·59	7·88	24·72	Various	Various.
	Royal Army Medical Corps ...	79	20	—	—	—	2	1·96	253·2	—	25·32	24·81	9·06	35·77	Various	Various.
	Army Ordnance Corps	67	18	—	—	—	2	1·59	268·7	—	29·85	23·73	8·66	32·24	Various	Various.
	Garrison Staff, &c.	13	4	—	—	—	—	·09	307·7	—	—	6·92	2·53	8·21	Various	Various.
	Total	228	64	1	—	1	4	5·13	280·7	4·39	17·54	22·50	8·21	29·26		
	Grand Total	4,689	1,861	13	6	19	97	140·05	396·9	4·05	20·69	29·87	10·90	27·47		
	MALTA.															
	Royal Artillery.															
44th	Royal Garrison Artillery ...	165	74	—	—	—	13	8·04	448·5	—	78·79	48·73	17·79	39·66	Fort Tigne, 10½ months To England, 17th November	—
46th	Royal Garrison Artillery ...	222	70	1	—	1	11	6·26	315·3	4·50	49·55	28·20	10·29	32·64	Fort Tigné, 10½ months, St. Elmo, 1½ months	2
63rd	Royal Garrison Artillery ...	224	107	2	—	2	6	6·99	477·7	8·93	26·79	31·21	11·39	23·84	Pembroke, 12 months	1
77th	Royal Garrison Artillery ...	209	90	—	—	—	2	6·86	430·6	—	9·57	32·82	11·98	27·82	Fort Ricasoli, 8 months, St. Elmo, 4 months	1
81st	Royal Garrison Artillery ...	219	63	1	—	1	4	5·84	287·7	4·57	18·26	26·67	9·73	33·83	Fort Ricasoli, 12 months	1

Battery, Company, or Battn.	Corps and Commands.	Average Annual Strength.	Admitted into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids sent Home.	Average Number Constantly Sick.	Ratio per 1,000 of Strength. Admitted.	Died.	Invalided.	Constantly Sick.	Sick Time to each Soldier.	Duration of each Case of Sickness.	Stations occupied during the Year.	Completed Years of Service in the Command.
	MALTA—*contd.*												days.	days.		
92nd	Royal Garrison Artillery ...	234	125	—	1	1	5	8·96	534·2	4·27	21·37	38·29	13·98	26·16	Fort Tigné, 12 months	1
93rd	Royal Garrison Artillery ...	201	99	3	—	3	7	6·84	492·5	14·93	34·83	34·03	12·42	25·22	Fort Ricasoli, 12 months	1
95th	Royal Garrison Artillery ...	180	105	—	—	—	6	6·56	583·3	—	33·33	36·44	13·30	22·80	Fort St. Elmo, 10½ months. To Bermuda, 17th November	—
96th	Royal Garrison Artillery ...	216	61	—	—	—	7	5·08	282·4	—	32·41	23·52	8·58	30·40	Fort Ricasoli, 12 months	1
99th	Royal Garrison Artillery ...	33	8	—	—	—	—	·83	242·4	—	—	25·15	9·18	37·87	Fort Tigné, 1½ months. From Gibraltar, 17th November	—
100th	Royal Garrison Artillery ...	29	16	—	—	—	—	1·21	551·7	—	—	41·72	15·23	27·60	Pembroke, 1½ months. From Gibraltar, 17th November	—
	District Staff, Royal Artillery ...	27	6	—	—	—	2	·77	222·2	—	74·07	28·52	10·41	46·84	Various	Various.
	Total	1,959	824	7	1	8	63	64·24	420·6	4·08	32·16	32·79	11·97	28·46		
	Royal Engineers.	380	94	1	—	1	10	5·86	247·4	2·63	26·32	15·42	5·63	22·76	Various	Various.
	Infantry Regiments.															
1st	Royal Lancaster Regiment ...	663	502	5	1	6	30	33·17	757·2	9·05	45·25	50·03	18·26	24·12	Cottonera, 8½ months. To Bombay, 17th September	—
2nd	Hampshire Regiment	219	143	1	—	1	—	8·81	653·0	4·57	—	40·23	14·68	22·49	Cottonera, 3½ months. From England, 17th September	—
2nd	King's Own Yorkshire L.I. ...	961	714	3	—	3	19	43·79	743·0	3·12	19·77	45·57	16·63	22·39	Pembroke, 12 months	1
1st	King's Royal Rifle Corps ...	824	983	6	1	7	96	83·65	1193·0	8·50	116·50	101·52	37·06	31·06	Floriana, 12 months	1
2nd	Cameron Highlanders	899	622	2	—	2	45	43·03	691·9	2·22	50·06	47·86	17·47	25·25	Crete, 5 months, Manoel, 7 months ...	1

1st	Royal Dublin Fusiliers	804	767	3	—	3	12	46·25	954·0	3·73	14·93	57·32	21·00	22·01	Manoel, 5 months, Crete, 7 months ...	1
1st	Royal Garrison Regiment ...	799	333	6	1	7	35	27·79	416·8	8·76	43·80	34·78	12·70	30·46	Verdala, 10 months, Lower St. Elmo, 2 months	2
3rd	Royal Garrison Regiment ...	746	400	9	—	9	31	26·89	536·2	12·06	41·56	36·05	13·16	24·54	Lower St. Elmo, 10 months, Imtarfa, 2 months	2
4th	Royal Garrison Regiment ...	727	262	8	1	9	30	27·65	360·4	12·38	41·27	38·03	13·88	38·52	Imtarfa, 10 months, Verdala, 2 months	2
	Other Infantry	12	3	2	—	2	6	1·98	250·0	166·67	500·00	165·00	60·22	240·90	Various	Various.
	Total	6,654	4,729	45	4	49	304	343·01	710·7	7·36	45·69	51·55	18·82	26·48		
	Garrison Staff and Departments.															
	Army Service Corps	45	8	—	—	—	1	·44	177·8	—	22·22	9·78	3·57	20·07	Various	Various.
	Royal Army Medical Corps ...	150	95	1	—	1	9	6·48	633·3	6·67	60·00	43·20	15·77	24·90	Various	Various.
	Army Ordnance Corps	75	21	—	—	—	1	1·31	280·0	—	13·33	17·47	6·38	22·77	Various	Various.
	Garrison Staff and Departments	50	11	—	—	—	2	·94	220·0	—	40·00	18·80	6·86	31·19	Various	Various.
	Total	320	135	1	—	1	13	9·17	421·9	3·13	40·63	28·66	10·46	24·79		
	Grand Total	9,313	5,782	54	5	59	390	422·28	620·9	6·34	41·88	45·34	16·55	26·66		
	CANADA.															
	Royal Artillery.															
58th	Royal Garrison Artillery... ...	235	105	—	—	—	6	7·29	446·8	—	25·53	31·02	11·32	25·34	Halifax, N.S., 12 months. To Esquimault	2
85rd	Royal Garrison Artillery... ...	198	71	—	—	—	—	3·00	358·6	—	—	15·15	5·53	15·42	Victoria, B.C., 12 months. To Hong Kong, 29th December	—
98th	Royal Garrison Artillery... ...	243	97	—	—	—	2	5·87	399·2	—	8·23	24·16	8·82	22·09	Halifax, N.S., 12 months	1
103rd	Royal Garrison Artillery... ...	19	5	1	—	1	—	·09	263·2	52·63	—	4·74	1·73	6·57	Halifax, N.S., 1 month. From Bermuda, 7th December	—
	Total	695	278	1	—	1	8	16·25	400·0	1·44	11·51	23·38	8·53	21·34		

Battery, Company, or Battn.	Corps and Commands.	Average Annual Strength.	Admitted into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids sent Home.	Average Number Constantly Sick.	Ratio per 1,000 of Strength. Admitted.	Died.	Invalided.	Constantly Sick.	Sick Time to each Soldier.	Average Duration of each Case of Sickness.	Stations occupied during the Year.	Completed Years of Service in the Command.
	CANADA—*contd.*															
	Royal Engineers.												days.	days.		
18th	Royal Engineers	83	16	—	—	—	1	1·02	192·8	—	12·05	12·29	4·49	23·27	Halifax, N.S., 12 months	16
40th	Royal Engineers	54	12	1	—	1	1	·70	222·2	18·52	18·52	12·96	4·73	21·29	Halifax, N.S., 12 months	15
2/44th	Royal Engineers	39	5	—	—	—	—	·55	128·2	—	—	14·10	5·15	40·15	Victoria, B.C., 12 months	4
48th	Royal Engineers	51	6	—	—	—	—	1·10	117·6	—	—	21 57	7·87	66·92	Victoria, B.C., 12 months	4
	Supernumerary Staff	25	2	—	—	—	—	·07	80·0	—	—	2·80	1·02	12·78	Various	Various.
	Total	252	41	1	—	1	2	3·44	162·7	3·97	7·94	13·65	4·98	30·62		
	Infantry Regiment.															
5th	Royal Garrison Regiment ...	966	308	2	1	3	26	18·98	318·8	3·11	26·92	19·65	7·17	22·19	Halifax, N.S., 12 months	1
	Garrison Staff and Departments.	73	16	1	—	1	—	·86	219·2	13·70	—	11·78	4·30	19·62	Various	Various.
	Grand Total	1,986	643	5	1	6	36	39·53	323·8	3·02	18·13	19·91	7·26	22·44		
	BERMUDA.															
	Royal Artillery.															
2nd	Royal Garrison Artillery... ...	16	7	—	—	—	—	·39	437·5	—	—	24·38	8·90	20·34	St. George's and Watford, 1 month. From England, 2nd December	—
3rd	Royal Garrison Artillery... ...	19	8	—	—	—	—	·40	421·1	—	—	21·05	7·68	18·25	St. George's and Watford, 1 month. From England, 2nd December	—

66th	Royal Garrison Artillery... ...	162	89	—	—	—	7	5·46	549·4	—	43·21	33·71	12·30	22·39	St. George's, 11 months. Detachment at Watford, 6 months. To Jamaica, 3rd December	—
67th	Royal Garrison Artillery... ...	184	82	2	—	2	7	4·85	445·6	10·87	38·04	26·36	9·62	21·59	St. George's, 11 months. Detachment at Watford, 6 months. To St. Lucia, 3rd December	—
95th	Royal Garrison Artillery... ...	14	6	—	—	—	—	·47	428·6	—	—	33·57	12·25	28·59	St. George's, 1 month. From England, 3rd December	—
103rd	Royal Garrison Artillery... ...	193	86	—	—	—	3	4·46	445·6	—	15·54	23·11	8·44	18·93	St. George's, 11 months. Detachment at Watford, 6 months. To Halifax, 3rd December	—
	Dist. Establishment, &c., R.G.A.	24	3	—	—	—	—	·19	125·0	—	—	7·92	2·89	23·12	Prospect and St. George's, 12 months ...	Various.
	Total	612	281	2	—	2	17	16·22	459·2	3·27	27·78	26·50	9·67	21·07		
	Royal Engineers.															
3rd	Royal Engineers	87	37	—	—	—	2	2·09	425·3	—	22·99	24·02	8·77	20·62	Watford, 12 months	Various.
27th	Royal Engineers	100	20	—	—	—	2	1·03	200·0	—	20·00	10·30	3·76	18·80	St. George's, 12 months	Various.
36th	Royal Engineers	77	18	—	—	—	1	1·41	233·8	—	12·99	18·31	6·68	28·59	Prospect, 12 months	Various.
	Total	264	75	—	—	—	5	4·53	284·1	—	18·94	17·16	6·26	22·05		
	Infantry Regiments.															
3rd	Royal Warwickshire Regiment	964	516	5	—	5	28	25·31	535·3	5·19	29·05	26·25	9·58	17·90	Boaz, Watford, St. George's and Prospect, 12 months	—
3rd	Royal Fusiliers	78	74	1	—	1	—	2·78	948·7	12·82	—	35·64	13·01	13·71	Boaz and St. George's, 1 month. From Egypt, 4th December	—
4th	Worcestershire Regiment ...	567	396	—	1	1	16	22·16	698·4	1·76	28·22	39·08	14·26	20·43	Prospect, 11 months. Detachment at Watford, 1 month. To West Indies, 3rd December	—
	Other Infantry	6	2	—	—	—	1	·14	333·3	—	166·67	23·33	8·51	25·55	Various	Various.
	Total	1,615	988	6	1	7	45	50·39	611·8	4·33	27·87	31·20	11·39	18·62		
	Garrison Staff and Departments.															
	Army Service Corps	14	1	—	—	—	—	·32	71·4	—	—	22·86	8·34	116·80	Various	Various.
	Royal Army Medical Corps ...	29	9	—	—	—	2	·70	310·3	—	68·97	24·14	8·81	28·39	Various	Various.

ABSTRACT No. XXXIV.—Table, taken from the Reports of the Principal Medical Officers, showing general Health Statistics of the various Corps which served in the different Commands Abroad during the Year 1903.

Battery, Company, or Batn.	Corps and Commands.	Average Annual Strength.	Admitted into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids sent Home.	Average Number Constantly Sick.	Ratio per 1,000 of Strength. Admitted.	Died.	Invalided.	Constantly Sick.	Sick Time to each Soldier.	Duration of each Case of Sickness.	Stations occupied during the Year.	Completed Years of Service in the Command.
													days.	days.		
	GIBRALTAR.															
	Royal Artillery.															
1st	Royal Garrison Artillery ...	205	58	—	—	—	4	4·83	282·9	—	19·51	23·56	8·60	30·40	Gibraltar, 12 months	1
4th	Royal Garrison Artillery ...	33	16	1	—	1	—	·73	484·9	30·30	—	22·12	8·07	16·65	From England, 10th November... ...	—
5th	Royal Garrison Artillery ...	33	12	—	—	—	—	·86	363·6	—	—	24·24	8·85	24·33	From England, 10th November	—
6th	Royal Garrison Artillery ...	30	21	—	—	—	—	1·36	700·0	—	—	45·33	16·55	23·64	From England, 10th November	—
46th	Royal Garrison Artillery ...	183	69	—	1	1	4	3·69	377·0	5·46	21·86	20·16	7·36	19·52	To Sierra Leone, 10th November ...	—
49th	Royal Garrison Artillery ...	254	106	—	1	1	12	10·51	417·3	3·94	47·24	41·38	15·10	36·19	Gibraltar, 12 months	1
50th	Royal Garrison Artillery ...	242	133	2	—	2	5	10·57	549·6	8·26	20·66	43·68	15·94	29·01	Gibraltar, 12 months	1
99th	Royal Garrison Artillery ...	171	119	1	1	2	7	9·04	695·9	11·70	40·94	52·87	19·30	27·73	To Malta, 10th November...	—
100th	Royal Garrison Artillery ...	186	78	—	1	1	3	4·89	419·4	5·38	16·13	26·29	9·60	22·88	To Malta, 10th November...	—
102nd	Royal Garrison Artillery ...	194	109	1	—	1	4	8·33	561·9	5·15	20·62	42·94	15·67	27·89	Gibraltar, 12 months	1
	Total	1,531	721	5	4	9	39	54·75	470·9	5·88	25·47	35·76	13·05	27·72		
	Royal Engineers.	410	137	1	—	1	2	9·89	334·2	2·44	4·88	24·12	8·80	26·35	Gibraltar, 12 months	Various

	Infantry Regiments.															
1st	Lancashire Fusiliers	724	349	—	—	—	17	25·79	482·0	—	23·48	35·62	13·00	26·97	Gibraltar, 12 months	1
2nd	Loyal North Lancashire Regiment	797	373	1	—	1	12	24·69	468·0	1·25	15·06	20·98	11·31	24·16	Gibraltar, 12 months	1
2nd	Royal Garrison Regiment ...	998	217	5	1	6	23	18·96	217·4	6·01	23·05	19·00	6·93	31·89	Gibraltar, 12 months	2
	Other Infantry	1	—	—	1	1	—	·84	—	—	—	—	—	—	—	—
	Total	2,520	939	6	2	8	52	70·28	372·6	3·17	20·63	27·89	10·18	27·32		
	Garrison Staff and Departments.															
	Army Service Corps	69	22	1	—	1	—	1·49	318·8	14·49	—	21·59	7·88	24·72	Various	Various.
	Royal Army Medical Corps ...	79	20	—	—	—	2	1·96	253·2	—	25·32	24·81	9·06	35·77	Various	Various.
	Army Ordnance Corps	67	18	—	—	—	2	1·59	268·7	—	29·85	23·73	8·66	32·24	Various	Various.
	Garrison Staff, &c.	13	4	—	—	—	—	·09	307·7	—	—	6·92	2·53	8·21	Various	Various.
	Total	228	64	1	—	1	4	5·13	280·7	4·39	17·54	22·50	8·21	29·26		
	Grand Total	4,689	1,861	13	6	19	97	140·05	396·9	4·05	20·69	29·87	10·90	27·47		
	MALTA.															
	Royal Artillery.															
44th	Royal Garrison Artillery ...	165	74	—	—	—	13	8·04	448·5	—	78·79	48·73	17·79	39·66	Fort Tigne, 10½ months To England, 17th November	—
48th	Royal Garrison Artillery ...	222	70	1	—	1	11	6·26	315·3	4·56	49·55	28·20	10·29	32·64	Fort Tigné, 10½ months, St. Elmo, 1½ months	2
63rd	Royal Garrison Artillery ...	224	107	2	—	2	6	6·99	477·7	8·93	26·79	31·21	11·39	23·84	Pembroke, 12 months	1
77th	Royal Garrison Artillery ...	209	90	—	—	—	2	6·86	430·6	—	9·57	32·82	11·98	27·82	Fort Ricasoli, 8 months, St. Elmo, 4 months	1
81st	Royal Garrison Artillery ...	219	63	1	—	1	4	5·84	287·7	4·57	18·26	26·67	9·73	33·83	Fort Ricasoli, 12 months	1

Battery, Company, or Batln.	Corps and Commands.	Average Annual Strength.	Admitted into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids sent Home.	Average Number Constantly Sick.	Ratio per 1,000 of Strength. Admitted.	Died.	Invalided.	Constantly Sick.	Sick each Soldier. Average Time to	Duration of each Case of Sickness. Average	Stations occupied during the Year.	Completed Years of Service in the Command.
	MALTA—*contd.*												days.	days.		
92nd	Royal Garrison Artillery ...	234	125	—	1	1	5	8·96	534·2	4·27	21·37	38·29	13·98	26·16	Fort Tignè, 12 months	1
93rd	Royal Garrison Artillery ...	201	99	3	—	3	7	6·84	492·5	14·93	34·83	34·03	12·42	25·22	Fort Ricasoli, 12 months	1
95th	Royal Garrison Artillery ...	180	105	—	—	—	6	6·56	583·3	—	33·33	36·44	13·30	22·80	Fort St. Elmo, 10½ months. To Bermuda, 17th November	—
96th	Royal Garrison Artillery ...	216	61	—	—	—	7	5·08	282·4	—	32·41	23·52	8·58	30·40	Fort Ricasoli, 12 months	1
99th	Royal Garrison Artillery ...	33	8	—	—	—	—	·83	242·4	—	—	25·15	9·18	37·87	Fort Tignè, 1½ months. From Gibraltar, 17th November	—
100th	Royal Garrison Artillery ...	29	16	—	—	—	—	1·21	551·7	—	—	41·72	15·23	27·60	Pembroke, 1½ months. From Gibraltar, 17th November	—
	District Staff, Royal Artillery ...	27	6	—	—	—	2	·77	222·2	—	74·07	28·52	10·41	46·84	Various	Various.
	Total	1,959	824	7	1	8	63	64·24	420·6	4·08	32·16	32·79	11·97	28·46		
	Royal Engineers.	380	94	1	—	1	10	5·86	247·4	2·63	26·32	15·42	5·63	22·76	Various	Various.
	Infantry Regiments.															
1st	Royal Lancaster Regiment ...	663	502	5	1	6	30	33·17	757·2	9·05	45·25	50·03	18·26	24·12	Cottonera, 8½ months. To Bombay, 17th September	—
2nd	Hampshire Regiment	219	143	1	—	1	—	8·81	653·0	4·57	—	40·23	14·68	22·49	Cottonera, 3½ months. From England, 17th September	—
2nd	King's Own Yorkshire L.I. ...	961	714	3	—	3	19	43·79	743·0	3·12	19·77	45·57	16·63	22·39	Pembroke, 12 months	1
1st	King's Royal Rifle Corps ...	824	983	6	1	7	96	83·65	1193·0	8·50	116·50	101·52	37·06	31·06	Floriana, 12 months	1
2nd	Cameron Highlanders	899	622	2	—	2	45	43·03	691·9	2·22	50·06	47·86	17·47	25·25	Crete, 5 months, Manoel, 7 months ...	1

1st	Royal Dublin Fusiliers	804	767	3	—	3	12	46·25	954·0	3·73	14·93	57·52	21·00	22·01	Manoel, 5 months, Crete, 7 months ...	1
1st	Royal Garrison Regiment ...	799	333	6	1	7	35	27·79	416·8	8·76	43·80	34·78	12·70	30·46	Verdala, 10 months, Lower St. Elmo, 2 months	2
3rd	Royal Garrison Regiment ...	746	400	9	—	9	31	26·89	536·2	12·06	41·56	36·05	13·16	24·54	Lower St. Elmo, 10 months, Imtarfa, 2 months	2
4th	Royal Garrison Regiment ...	727	262	8	1	9	30	27·65	360·4	12·38	41·27	38·03	13·88	38·52	Imtarfa, 10 months, Verdala, 2 months	2
	Other Infantry	12	3	2	—	2	6	1·98	250·0	166·67	500·00	165·00	60·22	240·90	Various	Various.
	Total	6,654	4,729	45	4	49	304	343·01	710·7	7·36	45·69	51·55	18·82	26·48		
	Garrison Staff and Departments.															
	Army Service Corps	45	8	—	—	—	1	·44	177·8	—	22·22	9·78	3·57	20·07	Various	Various.
	Royal Army Medical Corps ...	150	95	1	—	1	9	6·48	633·3	6·67	60·00	43·20	15·77	24·90	Various	Various.
	Army Ordnance Corps	75	21	—	—	—	1	1·31	280·0	—	13·33	17·47	6·38	22·77	Various	Various.
	Garrison Staff and Departments	50	11	—	—	—	2	·94	220·0	—	40·00	18·80	6·86	31·19	Various	Various.
	Total	320	135	1	—	1	13	9·17	421·9	3·13	40·63	28·66	10·46	24·79		
	Grand Total	9,313	5,782	54	5	59	390	422·28	620·9	6·34	41·88	45·34	16·55	26·66		
	CANADA.															
	Royal Artillery.															
58th	Royal Garrison Artillery... ...	235	105	—	—	—	6	7·29	446·8	—	25·53	31·02	11·32	25·34	Halifax, N.S., 12 months. To Esquimault	2
82nd	Royal Garrison Artillery... ...	198	71	—	—	—	—	3·00	358·6	—	—	15·15	5·53	15·42	Victoria, B.C., 12 months. To Hong Kong, 29th December	—
98th	Royal Garrison Artillery... ...	243	97	—	—	—	2	5·87	399·2	—	8·23	24·16	8·82	22·09	Halifax, N.S., 12 months	1
103rd	Royal Garrison Artillery... ...	19	5	1	—	1	—	·09	263·2	52·63	—	4·74	1·73	6·57	Halifax, N.S., 1 month. From Bermuda, 7th December	—
	Total	695	278	1	—	1	8	16·25	400·0	1·44	11·51	23·38	8·53	21·34		

Battery, Company, or Battn.	Corps and Commands.	Average Annual Strength.	Admitted into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids sent Home.	Average Number Constantly Sick.	Ratio per 1,000 of Strength. Admitted.	Died.	Invalided.	Constantly Sick.	Sick Time to each Soldier.	Average Duration of each Case of Sickness.	Stations occupied during the Year.	Completed Years of Service in the Command.
	CANADA—*contd.*															
	Royal Engineers.												days.	days.		
18th	Royal Engineers	83	16	—	—	—	1	1·02	192·8	—	12·05	12·29	4·49	23·27	Halifax, N.S., 12 months	16
40th	Royal Engineers	54	12	1	—	1	1	·70	222·2	18·52	18·52	12·96	4·73	21·29	Halifax, N.S., 12 months	15
2/44th	Royal Engineers	39	5	—	—	—	—	·55	128·2	—	—	14·10	5·15	40·15	Victoria, B.C., 12 months	4
48th	Royal Engineers	51	6	—	—	—	—	1·10	117·6	—	—	21 57	7·87	66·92	Victoria, B.C., 12 months	4
	Supernumerary Staff	25	2	—	—	—	—	·07	80·0	—	—	2·80	1·02	12·78	Various	Various.
	Total	252	41	1	—	1	2	3·44	162·7	3·97	7·94	13·65	4·98	30·62		
	Infantry Regiment.															
5th	Royal Garrison Regiment ...	966	308	2	1	3	26	18·98	318·8	3·11	26·92	19·65	7·17	22·19	Halifax, N.S., 12 months	1
	Garrison Staff and Departments.	73	16	1	—	1	—	·86	219·2	13·70	—	11·78	4·30	19·62	Various	Various.
	Grand Total	1,986	643	5	1	6	36	39·53	323·8	3·02	18·13	19·91	7·26	22·44		
	BERMUDA.															
	Royal Artillery.															
2nd	Royal Garrison Artillery... ...	16	7	—	—	—	—	·39	437·5	—	—	24·38	8·90	20·34	St. George's and Watford, 1 month. From England, 2nd December	—
3rd	Royal Garrison Artillery... ...	19	8	—	—	—	—	·40	421·1	—	—	21·05	7·68	18·25	St. George's and Watford, 1 month. From England, 2nd December	—

66th	Royal Garrison Artillery... ...	162	89	—	—	—	7	5·46	549·4	—	43·21	33·71	12·30	22·39	St. George's, 11 months. Detachment at Watford, 6 months. To Jamaica, 3rd December	—
67th	Royal Garrison Artillery... ...	184	82	2	—	2	7	4·85	445·6	10·87	38·04	26·36	9·62	21·59	St. George's, 11 months. Detachment at Watford, 6 months. To St. Lucia, 3rd December	—
95th	Royal Garrison Artillery... ...	14	6	—	—	—	—	·47	428·6	—	—	33·57	12·25	28·59	St. George's, 1 month. From England, 3rd December	—
103rd	Royal Garrison Artillery... ...	193	86	—	—	—	3	4·46	445·6	—	15·54	23·11	8·44	18·93	St. George's, 11 months. Detachment at Watford, 6 months. To Halifax, 3rd December	—
	Dist. Establishment, &c., R.G.A.	24	3	—	—	—	—	·19	125·0	—	—	7·92	2·89	23·12	Prospect and St. George's, 12 months ...	Various.
	Total	612	281	2	—	2	17	16·22	459·2	3·27	27·78	26·50	9·67	21·07		
	Royal Engineers.															
3rd	Royal Engineers	87	37	—	—	—	2	2·09	425·3	—	22·99	24·02	8·77	20·62	Watford, 12 months	Various.
27th	Royal Engineers	100	20	—	—	—	2	1·03	200·0	—	20·00	10·30	3·76	18·80	St. George's, 12 months	Various.
36th	Royal Engineers	77	18	—	—	—	1	1·41	233·8	—	12·99	18·31	6·68	28·59	Prospect, 12 months	Various.
	Total	264	75	—	—	—	5	4·53	284·1	—	18·94	17·16	6·26	22·05		
	Infantry Regiments.															
3rd	Royal Warwickshire Regiment	964	516	5	—	5	28	25·31	535·3	5·19	29·05	26·25	9·58	17·90	Boaz, Watford, St. George's and Prospect, 12 months	—
3rd	Royal Fusiliers	78	74	1	—	1	—	2·78	948·7	12·82	—	35·64	13·01	13·71	Boaz and St. George's, 1 month. From Egypt, 4th December	—
4th	Worcestershire Regiment ...	567	396	—	1	1	16	22·16	698·4	1·76	28·22	39·08	14·26	20·43	Prospect, 11 months. Detachment at Watford, 1 month. To West Indies, 3rd December	—
	Other Infantry	6	2	—	—	—	1	·14	333·3	—	166·67	23·33	8·51	25·55	Various	Various.
	Total	1,615	988	6	1	7	45	50·39	611·8	4·33	27·87	31·20	11·39	18·62		
	Garrison Staff and Departments.															
	Army Service Corps	14	1	—	—	—	—	·32	71·4	—	—	22·86	8·34	116·80	Various	Various.
	Royal Army Medical Corps ...	29	9	—	—	—	2	·70	310·3	—	68·97	24·14	8·81	28·39	Various	Various.

Battery, Company, or Battalion.	Corps.	Average Annual Strength.	Admitted into Hospital.	Died.	Invalided.	Average Constantly Sick.	Ratio per 1,000 of Strength.				Average Sick Time to each Soldier.	Average Duration of each Case of Sickness.	Stations occupied during the Year.	Years at Home since last return from Service Abroad.
							Admitted.	Died.	Invalided.	Average Constantly Sick.				
	REGIMENTAL DEPÔTS—*cont.*										days.	days.		
Depôt.	Liverpool Regiment	154	38	—	2	1·48	246·8	—	12·99	9·61	3·51	14·22	Warrington	Since formation.
,,	Norfolk Regiment...	202	95	—	—	4·09	470·3	—	—	20·25	7·39	15·72	Norwich	,,
,,	Lincolnshire Regiment	162	102	—	6	4·32	629·6	—	37·04	26·67	9·73	15·46	Lincoln	,,
,,	Devonshire Regiment	165	90	—	2	2·80	545·5	—	12·12	16·97	6·19	11·36	Exeter	,,
,,	Suffolk Regiment	180	108	1	—	4·05	600·0	5·56	—	22·50	8·21	13·69	Bury St. Edmunds	,,
,,	Somersetshire Light Infantry	175	106	2	—	3·61	605·7	11·43	—	20·63	7·53	12·43	Taunton	,,
,,	West Yorkshire Regiment	217	158	2	16	6·20	728·1	9·22	73·73	28·57	10·43	14·32	York	,,
,,	East Yorkshire Regiment	169	187	—	5	4·12	1106·5	—	29·59	24·38	8·90	8·05	Beverley	,,
,,	Bedfordshire Regiment	173	117	—	2	3·97	676·3	—	11·56	22·95	8·38	12·38	Bedford	,,
,,	Leicestershire Regiment	200	117	—	1	4·28	585·0	—	5·00	21·40	7·81	13·35	Leicester	,,
,,	Royal Irish Regiment	145	91	—	2	3·84	627·9	—	13·79	26·48	9·67	15·46	Clonmel	,,
,,	Yorkshire Regiment	176	26	1	—	1·53	147·7	5·68	—	8·69	3·17	21·48	Richmond	,,
,,	Lancashire Fusiliers	235	53	—	—	2·13	225·5	—	—	9·06	3·21	14·67	Bury	,,
,,	Royal Scots Fusiliers	174	141	1	4	6·38	810·3	5·75	22·99	36·67	13·38	16·52	Ayr	,,
,,	Cheshire Regiment	173	59	1	—	3·96	341·0	5·78	—	22·89	8·35	24·50	Chester	,,
,,	Royal Welsh Fusiliers	171	143	3	6	5·12	836·3	17·54	35·09	29·94	10·93	13·07	Wrexham	,,

1st & 2nd	West India Regiment, &c. ...	6	2	—	—	—	1	·13	333·3	—	166·67	21·67	7·91	23·72	Various	
	Total	620	572	3	—	3	16	32·04	922·6	4·84	25·81	51·68	18·86	20·45		
	Garrison Staff and Department	43	4	1	—	1	—	·18	93·0	23·26	—	4·19	1·53	16·43	Barbados and St. Lucia	Various.
	Grand Total	882	789	5	—	5	26	47·85	894·6	5·67	29·48	54·25	19·80	22·14		
	JAMAICA.															
	Royal Artillery.															
47th	Royal Garrison Artillery... ...	160	174	—	—	—	8	10·01	1087·5	—	50·00	62·56	22·83	20·99	Up Park Camp, Greenwich Ridge, and Port Royal, 11½ months. To St. Helena	—
66th	Royal Garrison Artillery ...	11	1	—	—	—	—	·08	90·9	—	—	7·27	2·65	29·20	Greenwich, ½ month. From Bermuda...	—
	District Establishment, &c., R.G.A.	8	4	—	—	—	—	·08	500·0	—	—	10·00	3·65	7·30	Various stations	Various.
	Total	179	179	—	—	—	8	10·17	1000·0	—	44·69	56·52	20·74	20·74		
	Royal Engineers.	61	37	1	—	1	—	1·44	606·6	16·39	—	23·61	8·62	14·21	Various stations	Various.
	Infantry Regiments.															
3rd	Lancashire Fusiliers	244	200	1	—	1	5	11·48	819·7	4·10	20·49	47·05	17·17	20·95	Up Park Camp and Newcastle, 11½ months. To South Africa	—
4th	Worcestershire Regiment ...	13	8	—	—	—	—	·19	615·4	—	—	14·62	5·33	8·67	Newcastle, ½ month. From Bermuda ...	—
1st	West India Regiment (Staff) ...	17	13	—	—	—	—	·61	764·7	—	—	35·88	13·10	17·13	Up Park Camp, 12 months	Various.
	Total	274	221	1	—	1	5	12·28	806·6	3·65	18·25	44·82	16·36	20·28		
	Garrison Staff and Departments.	50	38	—	—	—	—	1·46	760·0	—	—	29·20	10·66	14·02	Various stations	Various.
	Grand Total	564	475	2	—	2	13	25·35	842·2	3·55	23·05	44·95	16·41	19·48		
	WESTERN AFRICA.															
	Various Corps	198	382	3	—	3	18	13·33	1929·3	15·15	90·91	67·32	24·57	12·74	Sierra Leone, 12 months	1

Battery, Company, or Battn.	Corps and Commands.	Average Annual Strength.	Admitted into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids sent Home.	Average Number Constantly Sick.	Ratio per 1,000 of Strength. Admitted.	Died.	Invalided.	Constantly Sick.	Sick Time to each Soldier.	Average duration of each Case of Sickness.	Stations occupied during the Year.	Completed Years of Service in the Command.
	ST. HELENA.												days.	days.		
97th	*Royal Garrison Artillery* ..	137	79	—	—	—	8	5·85	576·6	—	58·39	42·70	15·59	27·03	St. Helena, 12 months	2
	Royal Engineers	68	27	—	—	—	—	·78	397·1	—	—	11·47	4·19	10·54	St. Helena, 12 months	Various
	Infantry Regiments.															
3rd	Manchester Regiment	183	177	2	—	2	7	11·15	967·2	10·93	38·25	60·93	22·24	22·99	St. Helena, 12 months	1
2nd	Yorkshire Light Infantry ...	—	—	—	1	1	—	—	—	—	—	—	—	—	—	
	Total	183	177	2	1	3	7	11·15	967·2	16·39	38·25	60·93	22·24	22·99		
	Garrison Staff and Departments.	17	6	—	—	—	—	·24	352·9	—	—	14·12	5·15	14·60	St. Helena, 12 months	Various
	Grand Total	405	289	2	1	3	15	18·02	713·6	7·41	37·04	44·49	16·24	22·76		
	SOUTH AFRICA.															
	Cavalry.															
1st	King's Dragoon Guards	501	548	13	—	13	14	44·93	1,093·8	25·95	27·94	89·68	32·73	29·93	Potchefstroom, 9 months. To England, 8th October	—
2nd	Dragoon Guards	662	365	—	—	—	11	26·77	551·4	—	16·62	40·44	14·76	26·77	Middelburg, Transvaal, 10 months ...	4
7th	Dragoon Guards	679	456	8	—	8	27	36·02	671·6	11·78	39·76	53·05	19·36	28·83	Newcastle, 1 month, Mooi River, 6 months, Ladysmith, 5 months	4
3rd	Dragoon Guards	656	353	3	—	3	9	23·32	538·1	4·57	13·72	35·55	12·98	24·11	Harrismith, 12 months	2
2nd	Dragoons	598	405	2	1	3	14	33·00	677·3	5·02	23·41	55·18	20·14	29·74	Wynberg, 8 months, Middleburg, Cape Colony, 4 months	4
7th	Hussars	669	441	5	—	5	17	32·65	659·2	7·47	25·41	48·80	17·81	27·02	Krugersdorp, 12 months	2

8th	Hussars	555	494	9	—	9	65	56·69	890·1	16·22	117·13	102·14	37·28	41·89	Pretoria, 10 months. To England, 23rd October	—
14th	Hussars	128	112	11	—	11	15	12·66	875·0	85·94	117·19	93·91	36·10	41·26	Kroonstad, 3 months. To England, 23rd March	—
16th	Lancers	500	374	8	—	8	3	26·03	748·0	16·00	6·00	52·06	19·00	25·40	Middelburg, Cape Colony, 12 months ...	4
19th	Hussars	708	433	3	—	3	18	28·64	611·6	4·24	25·42	40·45	14·76	24·14	Standerton, 3 months, Kroonstad, 9 months	4
20th	Hussars	137	74	1	1	2	2	6·00	540·1	14·60	14·60	43·80	15·99	29·59	Bloemfontein, 3 months. To Egypt, 28th March	—
	Cavalry Details	70	70	—	—	—	24	20·20	1,000·0	—	342·86	288·57	105·33	105·33	Various stations.	—
	Total	5,863	4,125	63	2	65	219	346·91	703·6	11·09	37·35	59·17	21·60	30·70		
	Royal Artillery.															
R	Royal Horse Artillery	131	85	—	—	—	3	7·43	648·9	—	22·90	56·72	20·70	31·91	Krugersdorp, 12 months	4
T	Royal Horse Artillery	129	81	1	—	1	8	5·42	627·9	7·75	62·02	42·02	15·34	24·42	Krugersdorp, 12 months	4
2nd	Royal Field Artillery	115	72	—	—	—	4	5·37	626·1	—	34·78	48·70	17·04	27·22	Newcastle, 1 month, Mooi River, 7 months, Ladysmith, 4 months... ...	4
4th	Royal Field Artillery	118	86	—	—	—	6	6·29	728·8	—	50·85	53·31	19·46	26·70	Newcastle, 1 month, Mooi River, 5 months, Ladysmith, 4 months, Howick, 2 months	4
	Royal Field Artillery	129	69	2	—	2	5	7·14	534·9	15·50	38·76	55·35	20·20	37·77	Newcastle, 1 month, Mooi River, 7 months Ladysmith, 4 months	4
19th	Royal Field Artillery	132	129	2	—	2	—	10·05	977·3	15·15	—	76·14	27·79	28·44	Middelburg, Cape Colony, 12 months ...	4
20th	Royal Field Artillery	122	106	1	—	1	—	9·01	868·9	8·20	—	73·86	26·96	31·02	Middelburg, Cape Colony, 12 months ...	4
28th	Royal Field Artillery	135	77	1	—	1	—	8·09	570·4	7·41	—	59·93	21·87	38·35	Middelburg, Cape Colony, 12 months ...	4
38th	Royal Field Artillery	124	70	1	—	1	10	6·56	564·5	8·06	80·65	52·90	19·31	34·21	Newcastle, 1 month, Mooi River, 5 months, Ladysmith, 4 months, Howick, 2 months	
44th	Royal Field Artillery	124	121	3	—	3	4	10·17	975·8	24·19	32·26	82·02	29·94	30·68	Wynberg, 4 months, Mooi River, 4 months, Ladysmith, 4 months	4
76th	Royal Field Artillery	123	110	—	—	—	3	9·09	894·3	—	24·39	73·90	26·97	30·16	Bloemfontein, 8 months, Kroonstad, 2 months, Manœuvres, 2 months	4
78th	Royal Field Artillery	118	89	2	—	2	12	7·32	754·2	16·95	101·69	62·03	22·64	30·02	Newcastle, 1 month, Mooi River, 4 months, Ladysmith, 4 months, Howick, 3 months	4
81st	Royal Field Artillery	117	115	2	—	2	5	6·10	982·9	17·09	42·74	52·14	19·03	19·36	Harrismith, 7 months, Manœuvres, 2 months, Kroonstad, 2 months, Bloemfontein, 1 month	4

Battery, Company, or Battn.	Corps and Commands.	Average Annual Strength.	Admitted into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids sent Home.	Average Number Constantly Sick.	Ratio per 1,000 of Strength. Admitted.	Died.	Invalided.	Constantly Sick.	Sick Time to each Soldier.	Duration of each Case of Sickness.	Stations occupied during the Year.	Completed Years of Service in the Command.
	SOUTH AFRICA—*contd.*												days.	days.		
82nd	Royal Field Artillery	60	61	—	—	—	1	4·77	1,016·7	—	16·67	79·50	29·02	28·54	Modder River, 5 months, Bloemfontein, 3 months, Manœuvres, 2 months, Kroonstad, 2 months	4
83rd	Royal Field Artillery	111	77	—	—	—	6	6·30	693·7	—	54·05	56·76	20·72	29·86	Standerton, 12 months	1
84th	Royal Field Artillery	125	120	1	—	1	3	8·17	960·0	8·00	24·00	65·36	23·86	24·85	Middelburg, Transvaal, 12 months ...	4
85th	Royal Field Artillery	115	89	2	—	2	5	7·29	773·9	17·39	43·48	63·39	23·14	29·90	Potchefstroom, 11 months, Harrismith, 1 month	3
	Other Field Artillery	55	78	3	—	3	11	10·15	1,418·2	54·55	200·00	184·55	67·36	47·50	Various stations	Various
10th	M.B. Royal Garrison Artillery ...	11	2	—	—	—	1	·17	181·8	—	90·91	15·45	5·64	31·02	Pretoria, 2 months...	Various
56th	Royal Garrison Artillery... ...	131	123	—	—	—	7	5·92	938·9	—	53·43	45·19	16·49	17·57	Cape Peninsula, 12 months	4
57th	Royal Garrison Artillery... ...	173	119	—	—	—	5	8·10	687·9	—	28·90	46·82	17·09	24·84	Cape Peninsula, 12 months	1
	Dist. Estab. Royal Garrison Artillery	20	6	—	—	—	—	·17	300·0	—	—	8·50	3·10	10·34	Various stations	Various
	Total	2,418	1,385	21	—	21	99	149·08	779·6	8·68	40·94	61·65	22·50	28·87		
	Royal Engineers.	1,192	844	21	—	21	32	63·75	708·1	17·62	26·85	53·48	19·52	27·57	Various stations	Various
	Infantry Regiments.															
1st	Royal Scots...	80	24	—	—	—	—	1·33	300·0	—	—	16·62	6·07	20·22	Middleburg, Transvaal, 2 months. To England, 21st February	—
2nd	Royal West Surrey Regiment ...	627	434		—	9	7	21·31	692·2	14·35	11·16	33·99	12·41	17·92	Kroonstad, 12 months	4
2nd	Royal Lancaster Regiment ...	116	80	2	—	2	2	4·69	689·7	17·24	17·24	40·43	14·76	21·40	Maritzburg, 2 months. To England, 8th March	—

1st	Northumberland Fusiliers ...	120	130	—	—	—	2	8·02	1033·3	—	16·67	66·83	24·39	22·52	Wynberg, 3 months. To Mauritius, 7th April	—
3rd	Northumberland Fusiliers ...	648	619	3	—	3	24	47·61	955·2	4·63	37·04	73·47	26·82	28·07	Wynberg, 12 months	1
2nd	Norfolk Regiment	8	5	—	1	1	—	·91	625·0	125·00	—	113·75	41·52	66·43	Potchefstroom, 2 weeks. To England, 11th January	—
2nd	Lincolnshire Regiment	375	221	3	—	3	—	8·04	589·3	8·00	—	21·44	7·83	13·28	Barberton, 12 months	4
2nd	Devonshire Regiment	157	98	2	—	2	9	15·58	624·2	12·74	57·32	99·24	36·22	58·03	Standerton, 3 months. To England, 19th March	—
2nd	Somersetshire Light Infantry ...	156	132	3	—	3	3	11·61	846·2	19·23	19·23	74·42	27·16	32·10	Potchefstroom, 3 months. To England, 2nd April	—
2nd	West Yorkshire Regiment ...	489	541	2	—	2	17	34·36	1106·3	4·09	34·76	70·27	25·65	23·18	Howick, 4 months, Pietermaritzburg, 8 months	4
2nd	Bedfordshire Regiment	49	43	—	—	—	3	2·48	877·5	—	61·22	50·61	18·47	21·06	Naauwpoort, 4 months. To England, 27th April	—
1st	Royal Irish Regiment	1,038	494	5	—	5	—	34·62	475·9	4·82	—	33·35	12·17	25·58	Lydenburg, 1 month, Middelburg, Transvaal, 10 months, Potchefstroom, 1 month. Detachment, Barberton, 1 month	3
1st	Royal Welsh Fusiliers	3	1	—	—	—	—	·07	333·3	—	—	23·33	8·52	25·55	Potchefstroom, 1 week. To England, 6th January	—
2nd	South Wales Borderers	532	502	5	—	5	5	33·29	943·6	9·40	9·40	62·58	22·84	24·20	Bloemfontein, 12 months, Manœuvres, 2 months	4
1st	King's Own Scottish Borderers...	10	4	—	—	—	1	·31	400·0	—	100·00	31·00	11·31	28·29	Krugersdorp, 17 days. To England, 17th January	—
2nd	Scottish Rifles	636	376	5	—	5	33	35·09	591·2	7·86	51·89	55·17	20·14	34·06	Standerton, 12 months, Manœuvres, 2 months	4
2nd	Royal Inniskilling Fusiliers ...	707	360	10	—	10	6	20·58	509·2	14·14	8·49	29·11	10·62	20·87	Mafeking, 4 months, Potchefstroom, 6 months. To Egypt, 22nd October	—
2nd	Gloucestershire Regiment ...	454	387	5	—	5	5	28·04	852·4	11·01	11·01	61·76	22·54	26·45	Bloemfontein, 12 months, Manœuvres, 2 months	4
2nd	Worcestershire Regiment ...	563	344	4	—	4	6	25·94	611·0	7·10	10·66	46·07	16·82	27·52	Bloemfontein, 12 months, Manœuvres, 2 months	4
1st	Duke of Cornwall's Light Infantry	670	713	16	1	17	34	60·11	1064·2	25·37	50·75	89·72	32·75	30·77	Stellenbosch and CapeTown, 5 months, Middelburg, Cape Colony, 7 months	1
2nd	Duke of Cornwall's Light Infantry	14	11	—	—	—	3	2·13	785·7	—	214·29	152·14	55·53	70·68	Pretoria, 16 days. To England, 16th January	—
1st	South Staffordshire Regiment ...	534	498	6	1	7	16	31·17	932·6	13·11	29·96	58·37	21·31	22·85	Harrismith, 10 months, Middelburg, Transvaal, 2 months	3
1st	South Lancashire Regiment ...	14	6	—	—	—	4	1·66	429·6	—	285·71	118·57	43·28	100·98	Newcastle, 1 month. To India, 22nd January	—
1st	Welsh Regiment	497	558	4	—	4	33	43·74	1122·7	8·05	66·40	88·01	32·12	29·61	Pretoria, 12 months, Manœuvres, 2 months	4
2nd	Northamptonshire Regiment ...	540	521	10	—	10	33	39·51	964·8	18·52	61·11	73·17	26·71	27·68	Pietersburg, 3 months, Pretoria, 9 months	4
2nd	Shropshire Light Infantry ...	11	6	1	—	1	17	4·01	545·5	90·91	1545·45	364·55	133·06	243·94	Newcastle, 1 week. To India, 8th January	—

Battery, Company, or Battn.	Corps and Commands.	Average Annual Strength.	Admitted into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids sent Home.	Average Number Constantly Sick.	Ratio per 1,000 of Strength. Admitted.	Died.	Invalided.	Constantly Sick.	Sick Time to each Soldier.	Duration of each Case of Sickness.	Stations occupied during the Year.	Completed Years of Service in the Command.
													days.	days.		
	BERMUDA—*contd.*															
	Army Ordnance Corps	35	13	—	—	—	2	·67	371·4	—	57·14	19·14	6·99	18·81	Various	Various.
	Garrison Staff, &c....	8	3	—	—	—	1	·13	375·0	—	125·00	16·25	5·93	15·82	Various	Various.
	Total	86	26	—	—	—	5	1·82	302·3	—	58·14	21·16	7·72	25·55		
	Grand Total	2,577	1,370	8	1	9	72	72·96	531·6	3·49	27·94	28·31	10·33	19·44		
	WEST INDIES.															
	BARBADOS.															
	Royal Artillery.															
67th	Royal Garrison Artillery ...	7	5	—	—	—	—	·24	714·3	—	—	34·29	12·51	17·52	St. Lucia and Barbados, ½ month. From Bermuda	—
84th	Royal Garrison Artillery ...	153	196	1	—	1	9	14·82	1281·1	6·54	58·82	96·86	35·35	27·60	St. Lucia and Barbados, 11½ months. To South Africa	—
	District Establishment, &c., R.G.A.	27	2	—	—	—	1	·09	74·1	—	37·04	3·33	1·22	16·42	St. Lucia and Barbados, 12 months ...	Various.
	Total	187	203	1	—	1	10	15·15	1085·6	5·35	53·48	81·02	29·57	27·24		
	Royal Engineers.	32	10	—	—	—	—	·48	312·5	—	—	15·00	5·48	17·52	Barbados and St. Lucia	Various.
	Infantry Regiments.															
3rd	Lancashire Fusiliers	598	560	3	—	3	15	31·35	936·5	5·02	25·08	52·42	19·14	20·43	Barbados and Trinidad, 11½ months. To South Africa	—
4th	Worcestershire Regiment ...	16	10	—	—	—	—	·56	625·0	—	—	35·00	12·77	20·44	Barbados and Trinidad, ½ month. From Bermuda	—

1st & 2nd	West India Regiment, &c. ...	6	2	—	—	—	1	·13	333·3	—	166·67	21·67	7·91	23·72	Various	Various.
	Total	620	572	3	—	3	16	32·04	922·6	4·84	25·81	51·68	18·86	20·45		
	Garrison Staff and Department	43	4	1	—	1	—	·18	93·0	23·26	—	4·19	1·53	16·43	Barbados and St. Lucia	Various.
	Grand Total	882	789	5	—	5	26	47·85	894·6	5·67	29·48	54·25	19·80	22·14		
	JAMAICA.															
	Royal Artillery.															
67th	Royal Garrison Artillery... ...	160	174	—	—	—	8	10·01	1087·5	—	50·00	62·56	22·83	20·99	Up Park Camp, Greenwich Ridge, and Port Royal, 11½ months. To St. Helena	—
66th	Royal Garrison Artillery ...	11	1	—	—	—	—	·08	90·9	—	—	7·27	2·65	29·20	Greenwich, ½ month. From Bermuda...	—
	District Establishment, &c., R.G.A.	8	4	—	—	—	—	·08	500·0	—	—	10·00	3·65	7·30	Various stations	Various.
	Total	179	179	—	—	—	8	10·17	1000·0	—	44·69	56·52	20·74	20·74		
	Royal Engineers.	61	37	1	—	1	—	1·44	606·6	16·39	—	23·61	8·62	14·21	Various stations	Various.
	Infantry Regiments.															
3rd	Lancashire Fusiliers	244	200	1	—	1	5	11·48	819·7	4·10	20·49	47·05	17·17	20·95	Up Park Camp and Newcastle, 11½ months. To South Africa	—
4th	Worcestershire Regiment ...	13	8	—	—	—	—	·19	615·4	—	—	14·62	5·33	8·67	Newcastle, ½ month. From Bermuda ...	—
1st	West India Regiment (Staff) ...	17	13	—	—	—	—	·61	764·7	—	—	35·88	13·10	17·13	Up Park Camp, 12 months	Various.
	Total	274	221	1	—	1	5	12·28	806·6	3·65	18·25	44·82	16·36	20·28		
	Garrison Staff and Departments.	50	38	—	—	—	—	1·46	760·0	—	—	29·20	10·66	14·02	Various stations	Various.
	Grand Total	564	475	2	—	2	13	25·35	842·2	3·55	23·05	44·95	16·41	19·48		
	WESTERN AFRICA.															
	Various Corps	198	382	3	—	3	18	13·33	1929·3	15·15	90·91	67·32	24·57	12·74	Sierra Leone, 12 months	1

Battery, Company, or Battn.	Corps and Commands.	Average Annual Strength.	Admitted into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids sent Home.	Average Number Constantly Sick.	Ratio per 1,000 of Strength. Admitted.	Died.	Invalided.	Constantly Sick.	Sick Time to each Soldier.	Average duration of each Case of Sickness.	Stations occupied during the Year.	Completed Years of Service in the Command.
	ST. HELENA.												days.	days.		
97th	*Royal Garrison Artillery*	137	79	—	—	—	8	5·85	576·6	—	58·39	42·70	15·59	27·03	St. Helena, 12 months	2
	Royal Engineers.	68	27	—	—	—	—	·78	397·1	—	—	11·47	4·19	10·54	St. Helena, 12 months	Various
	Infantry Regiments.															
3rd	Manchester Regiment	183	177	2	—	2	7	11·15	967·2	10·93	38·25	60·93	22·24	22·99	St. Helena, 12 months	1
2nd	Yorkshire Light Infantry ...	—	—	—	1	1	—	—	—	—	—	—	—	—	—	
	Total	183	177	2	1	3	7	11·15	967·2	16·39	38·25	60·93	22·24	22·99		
	Garrison Staff and Departments.	17	6	—	—	—	—	·24	352·9	—	—	14·12	5·15	14·60	St. Helena, 12 months	Various
	Grand Total	405	289	2	1	3	15	18·02	713·6	7·41	37·04	44·49	16·24	22·76		
	SOUTH AFRICA.															
	Cavalry.															
1st	King's Dragoon Guards	501	548	13	—	13	14	44·93	1,093·8	25·95	27·94	89·68	32·73	29·93	Potchefstroom, 9 months. To England, 8th October	—
2nd	Dragoon Guards	662	365	—	—	—	11	26·77	551·4	—	16·62	40·44	14·76	26·77	Middelburg, Transvaal, 10 months ...	4
7th	Dragoon Guards	679	456	8	—	8	27	36·02	671·6	11·78	39·76	53·05	19·36	28·83	Newcastle, 1 month, Mooi River, 6 months, Ladysmith, 5 months	4
3rd	Dragoon Guards	656	353	3	—	3	9	23·32	538·1	4·57	13·72	35·55	12·98	24·11	Harrismith, 12 months	2
2nd	Dragoons	598	405	2	1	3	14	33·00	677·3	5·02	23·41	55·18	20·14	29·74	Wynberg, 8 months, Middleburg, Cape Colony, 4 months	4
7th	Hussars	669	441	5	—	5	17	32·65	659·2	7·47	25·41	48·80	17·81	27·02	Krugersdorp, 12 months	2

66th	Royal Garrison Artillery... ...	162	89	—	—	—	7	5·46	549·4	—	43·21	33·71	12·30	22·39	St. George's, 11 months. Detachment at Watford, 6 months. To Jamaica, 3rd December	—
67th	Royal Garrison Artillery... ...	184	82	2	—	2	7	4·85	445·6	10·87	38·04	26·36	9·62	21·59	St. George's, 11 months. Detachment at Watford, 6 months. To St. Lucia, 3rd December	—
95th	Royal Garrison Artillery... ...	14	6	—	—	—	—	·47	428·6	—	—	33·57	12·25	28·59	St. George's, 1 month. From England, 3rd December	—
103rd	Royal Garrison Artillery... ...	193	86	—	—	—	3	4·46	445·6	—	15·54	23·11	8·44	18·93	St. George's, 11 months. Detachment at Watford, 6 months. To Halifax, 3rd December	—
	Dist. Establishment, &c., R.G.A.	24	3	—	—	—	—	·19	125·0	—	—	7·92	2·89	23·12	Prospect and St. George's, 12 months ...	Various.
	Total	612	281	2	—	2	17	16·22	459·2	3·27	27·78	26·50	9·67	21·07		
	Royal Engineers.															
3rd	Royal Engineers	87	37	—	—	—	2	2·09	425·3	—	22·99	24·02	8·77	20·62	Watford, 12 months	Various.
27th	Royal Engineers	100	20	—	—	—	2	1·03	200·0	—	20·00	10·30	3·76	18·80	St. George's, 12 months	Various.
36th	Royal Engineers	77	18	—	—	—	1	1·41	233·8	—	12·99	18·31	6·68	28·59	Prospect, 12 months	Various.
	Total	264	75	—	—	—	5	4·53	284·1	—	18·94	17·16	6·26	22·05		
	Infantry Regiments.															
3rd	Royal Warwickshire Regiment	964	516	5	—	5	28	25·31	535·3	5·19	29·05	26·25	9·58	17·90	Boaz, Watford, St. George's and Prospect, 12 months	—
3rd	Royal Fusiliers	78	74	1	—	1	—	2·78	948·7	12·82	—	35·64	13·01	13·71	Boaz and St. George's, 1 month. From Egypt, 4th December	—
4th	Worcestershire Regiment ...	567	396	—	1	1	16	22·16	698·4	1·76	28·22	39·08	14·26	20·43	Prospect, 11 months. Detachment at Watford, 1 month. To West Indies, 3rd December	—
	Other Infantry	6	2	—	—	—	1	·14	333·3	—	166·67	23·33	8·51	25·55	Various	Various.
	Total	1,615	988	6	1	7	45	50·39	611·8	4·33	27·87	31·20	11·39	18·62		
	Garrison Staff and Departments.															
	Army Service Corps	14	1	—	—	—	—	·32	71·4	—	—	22·86	8·34	116·80	Various	Various.
	Royal Army Medical Corps ...	29	9	—	—	—	2	·70	310·3	—	68·97	24·14	8·81	28·39	Various	Various.

Battery, Company, or Battn.	Corps and Commands.	Average Annual Strength.	Admitted into Hospital.	Deaths.			Invalids sent Home.	Average Number Constantly Sick.	Ratio per 1,000 of Strength.				Sick Time to each Soldier.	Duration of each Case of Sickness.	Stations occupied during the Year.	Completed Years of Service in the Command.
				In the Command.	Of Invalids.	Total.			Admitted.	Died.	Invalided.	Constantly Sick.				
	SOUTH AFRICA—*contd.*												days.	days.		
82nd	Royal Field Artillery	60	61	—	—	—	1	4·77	1,016·7	—	16·67	79·50	29·02	28·54	Modder River, 5 months, Bloemfontein, 3 months, Manœuvres, 2 months, Kroonstad, 2 months	4
83rd	Royal Field Artillery	111	77	—	—	—	6	6·30	693·7	—	54·05	56·76	20·72	29·86	Standerton, 12 months	1
84th	Royal Field Artillery	125	120	1	—	1	3	8·17	960·0	8·00	24·00	65·36	23·86	24·85	Middelburg, Transvaal, 12 months ...	4
85th	Royal Field Artillery	115	89	2	—	2	5	7·29	773·9	17·39	43·48	63·39	23·14	29·90	Potchefstroom, 11 months, Harrismith, 1 month	3
	Other Field Artillery	55	78	3	—	3	11	10·15	1,418·2	54·55	200·00	184·55	67·36	47·50	Various stations	Various
10th	M.B. Royal Garrison Artillery ...	11	2	—	—	—	1	·17	181·8	—	90·91	15·45	5·64	31·02	Pretoria, 2 months...	Various
56th	Royal Garrison Artillery... ...	131	123	—	—	—	7	5·92	938·9	—	53·43	45·19	16·49	17·57	Cape Peninsula, 12 months	4
57th	Royal Garrison Artillery... ...	173	119	—	—	—	5	8·10	687·9	—	28·90	46·82	17·09	24·84	Cape Peninsula, 12 months	1
	Dist. Estab. Royal Garrison Artillery	20	6	—	—	—	—	·17	300·0	—	—	8·50	3·10	10·34	Various stations	Various
	Total	2,418	1,685	21	—	21	99	149·08	779·6	8·68	40·94	61·65	22·50	28·87		
	Royal Engineers.	1,192	844	21	—	21	32	63·75	708·1	17·62	26·85	53·48	19·52	27·57	Various stations	Various
	Infantry Regiments.															
1st	Royal Scots...	80	24	—	—	—	—	1·33	300·0	—	—	16·62	6·07	20·22	Middleburg, Transvaal, 2 months. To England, 21st February	—
2nd	Royal West Surrey Regiment ...	627	434		—	9	7	21·31	692·2	14·35	11·16	33·99	12·41	17·92	Kroonstad, 12 months	4
2nd	Royal Lancaster Regiment ...	116	80	2	—	2	2	4·69	689·7	17·24	17·24	40·43	14·76	21·40	Maritzburg, 2 months. To England, 8th March	—

1st	Northumberland Fusiliers ...	120	130	—	—	—	2	8·02	1083·3	—	16·67	66·83	24·39	22·52	Wynberg, 3 months. To Mauritius, 7th April	—
3rd	Northumberland Fusiliers ...	648	619	3	—	3	24	47·61	955·2	4·63	37·04	73·47	26·82	28·07	Wynberg, 12 months	1
2nd	Norfolk Regiment	8	5	—	1	1	—	·91	625·0	125·00	—	113·75	41·52	66·43	Potchefstroom, 2 weeks. To England, 11th January	—
2nd	Lincolnshire Regiment	375	221	3	—	3	—	8·04	589·3	8·00	—	21·44	7·83	13·28	Barberton, 12 months	4
2nd	Devonshire Regiment	157	98	2	—	2	9	15·58	624·2	12·74	57·32	99·24	36·22	58·03	Standerton, 3 months. To England, 19th March	—
2nd	Somersetshire Light Infantry ...	156	132	3	—	3	3	11·61	846·2	19·23	19·23	74·42	27·16	32·10	Potchefstroom, 3 months. To England, 2nd April	—
2nd	West Yorkshire Regiment ...	489	541	2	—	2	17	34·36	1106·3	4·09	34·76	70·27	25·65	23·18	Howick, 4 months, Pietermaritzburg, 8 months	4
2nd	Bedfordshire Regiment	49	43	—	—	—	3	2·48	877·5	—	61·22	50·61	18·47	21·06	Naauwpoort, 4 months. To England, 27th April	—
1st	Royal Irish Regiment	1,038	494	5	—	5	—	34·62	475·9	4·82	—	33·35	12·17	25·58	Lydenburg, 1 month, Middelburg, Transvaal, 10 months, Potchefstroom, 1 month. Detachment, Barberton, 1 month	3
1st	Royal Welsh Fusiliers	3	1	—	—	—	—	·07	333·3	—	—	23·33	8·52	25·55	Potchefstroom, 1 week. To England, 6th January	—
2nd	South Wales Borderers	532	502	5	—	5	5	33·29	943·6	9·40	9·40	62·58	22·84	24·20	Bloemfontein, 12 months, Manœuvres, 2 months	4
1st	King's Own Scottish Borderers...	10	4	—	—	—	1	·31	400·0	—	100·00	31·00	11·31	28·29	Krugersdorp, 17 days. To England, 17th January	—
2nd	Scottish Rifles	636	376	5	—	5	33	35·09	591·2	7·86	51·39	55·17	20·14	34·06	Standerton, 12 months, Manœuvres, 2 months	4
2nd	Royal Inniskilling Fusiliers ...	707	360	10	—	10	6	20·58	509·2	14·14	8·49	29·11	10·62	20·87	Mafeking. 4 months, Potchefstroom, 6 months. To Egypt, 22nd October	—
2nd	Gloucestershire Regiment ...	454	387	5	—	5	5	28·04	852·4	11·01	11·01	61·76	22·54	26·45	Bloemfontein, 12 months, Manœuvres, 2 months	4
2nd	Worcestershire Regiment ...	563	344	4	—	4	6	25·94	611·0	7·10	10·66	46·07	16·82	27·52	Bloemfontein, 12 months, Manœuvres, 2 months	4
1st	Duke of Cornwall's Light Infantry	670	713	16	1	17	34	60·11	1064·2	25·37	50·75	89·72	32·75	30·77	Stellenbosch and CapeTown, 5 months, Middelburg, Cape Colony. 7 months	1
2nd	Duke of Cornwall's Light Infantry	14	11	—	—	—	3	2·13	785·7	—	214·29	152·14	55·53	70·68	Pretoria, 16 days. To England, 16th January	—
1st	South Staffordshire Regiment ...	534	498	6	1	7	16	31·17	932·6	13·11	29·96	58·37	21·31	22·85	Harrismith, 10 months, Middelburg, Transvaal, 2 months	3
1st	South Lancashire Regiment ...	14	6	—	—	—	4	1·66	429·6	—	285·71	118·57	43·28	100·98	Newcastle, 1 month. To India, 22nd January	—
1st	Welsh Regiment	497	558	4	—	4	33	43·74	1122·7	8·05	66·40	88·01	32·12	29·61	Pretoria, 12 months, Manœuvres, 2 months	4
2nd	Northamptonshire Regiment ...	540	521	10	—	10	33	39·51	964·8	18·52	61·11	73·17	26·71	27·68	Pietersburg, 3 months, Pretoria, 9 months	4
2nd	Shropshire Light Infantry ...	11	6	1	—	1	17	4·01	545·5	90·91	1545·45	364·55	133·06	243·94	Newcastle, 1 week. To India, 8th January	—

Battery, Company, or Battn.	Corps and Commands.	Average Annual Strength.	Admitted into Hospital.	Deaths. In the Command.	Deaths. of Invalids.	Deaths. Total.	Invalids sent Home.	Average Number Constantly Sick.	Ratio per 1,000 of Strength. Admitted.	Died.	Invalided.	Constantly Sick.	Sick each Average Time to Soldier.	Average Duration of each Case of Sickness.	Stations occupied during the Year.	Completed Years of Service in the Command.
	SOUTH AFRICA—*contd.*												days.	days.		
2nd	Middlesex Regiment	15	4	1	—	1	3	1·00	266·7	66·67	200·00	66·67	24·33	91·25	Newcastle, 1 month. To England, 24th January	—
3rd	Middlesex Regiment	705	819	2	—	2	48	40·53	1161·7	2·84	68·09	57·48	20·98	18·06	Wynberg, 3 months, Naauwpoort, 9 months	1
3rd	King's Royal Rifle Corps... ...	79	40	—	—	—	—	3·25	506·3	—	—	41·14	15·02	29·65	Machadodorp, 2 months. To England, 26th February	—
4th	King's Royal Rifle Corps... ...	1,097	920	5	1	6	21	58·17	838·7	5·47	19·14	53·03	19·35	23·08	Harrismith, 12 months	2
2nd	Wiltshire Regiment	152	207	1	—	1	—	10·20	1361·8	6·58	—	67·11	24·49	17·99	Naauwpoort, 4 months. To England, 27th April	—
1st	Manchester Regiment	70	24	2	—	2	5	2·88	342·9	28·57	71·43	41·14	15·02	43·80	Standerton, 2 months. To Singapore, 8th March	—
3rd	Manchester Regiment	665	626	7	—	7	10	41·14	941·4	10·53	15·04	61·87	22·58	23·99	Middelburg, Cape Colony, 12 months ...	1
1st	Highland Light Infantry ...	57	20	—	—	—	—	·98	350·9	—	—	17·19	6·28	17·88	Port Elizabeth, 12 days. To Egypt, 13th January	—
2nd	Seaforth Highlanders	62	7	—	—	—	3	2·64	112·9	—	48·29	42·58	15·54	137·66	Pretoria, 16 days. To England, 16th January	—
2nd	Royal Irish Fusiliers	20	21	—	—	—	—	5·43	1050·0	—	—	271·50	99·10	94·38	Deelfontein, 14 days. To India, 15th January	—
1st	Argyll and Sutherland Highlanders	180	74	4	—	4	12	9·09	411·1	22·22	66·67	50·50	18·43	44·84	Johannesburg, 4 months. To England, 4th May	—
2nd	Leinster Regiment	854	666	11	—	11	25	55·36	779·9	12·88	29·27	64·82	23·66	30·34	Pretoria, 12 months, Manœuvres, 2 months. Detachment, Pietersburg, 2 months	2
	Other Infantry	328	380	11	1	12	169	77·80	1158·5	36·59	615·24	237·20	86·57	74·73	Various stations	Various.
	Mounted Infantry...	2,151	1,014	23	—	23	33	113·98	889·8	10·69	15·34	52·98	19·34	21·74	Various stations	Various.
	Total	15,483	12,830	162	5	167	592	938·66	828·7	10·79	38·24	60·63	22·13	26·70		

	Garrison Staff and Departments.															
	Army Service Corps	773	398	12	—	12	19	31·55	514·9	15·52	24·58	40·82	14·90	28·93	Various stations	Various.
	Royal Army Medical Corps ...	1,211	814	11	—	11	53	55·27	672·2	9·08	43·77	45·64	16·66	24·78	Various stations	Various.
	Army Ordnance Corps	512	229	1	—	1	15	17 96	447·3	1·95	29·30	35·08	12·80	28·63	Various stations	Various.
	Army Pay Corps	165	49	—	—	—	5	4·60	297·0	—	30·30	27·88	10 18	34·26	Various stations	Various.
	Garrison Staff	40	53	—	—	—	5	3·70	1325·0	—	125·00	92·50	33·76	25·48	Various stations	Various.
	Total	2,701	1,543	24	—	24	97	113·08	571·3	8·89	35·91	41·87	15·28	26·75		
	Imperial Yeomanry	23	29	4	1	5	27	5·91	1260·9	217·39	1173·91	256·96	93·79	74·38	Various stations	Various.
	Troops on Manœuvres	—	827	3	—	3	8	44·35	—	—	—	—	—	—	——	Various.
	Grand Total	27,680	22,083	208	8	306	374*	1661·74	797·8	11·06	38·80	60·03	21·91	27·47		
	MAURITIUS.															
	Royal Artillery.															
68th	Royal Garrison Artillery ...	144	105	1	—	1	6	9·43	729·2	6·94	41·67	65·49	23·90	32·78	Curepipe, 12 months	2
101st	Royal Garrison Artillery ...	146	148	1	1	2	5	10·26	1013·7	13·70	34·25	70·27	25·65	25·30	Curepipe, 12 months	2
	Ceylon and Mauritius Bn., R.G.A.	8	2	—	—	—	—	·04	250·0	—	—	5·00	1·83	7·30	——	—
	Total	298	255	2	1	3	11	19·73	855·7	10·07	36·91	66·21	24·17	28·24		
	Royal Engineers.	114	112	—	1	1	2	7·47	982·5	8·77	17·54	65·53	23·92	24·34	Curepipe, 12 months	Various.
	Infantry Regiment.															
1st	Northumberland Fusiliers ...	290	259	—	—	—	2	25·05	893·1	—	6·90	86·38	31·53	35·30	Curepipe, 7 months. From South Africa, 24th April	—
	Garrison Staff and Departments.	44	17	—	—	—	1	1·26	386·4	—	22·73	28·64	10·45	27·05	Curepipe, 12 months	—
	Grand Total	746	643	2	2	4	16	53·51	861·9	5·36	21·45	71·73	26·18	30·38		

* Includes 2 invalids discharged in the Command.

Battery, Company, or Battn.	Corps and Commands.	Average Annual Strength.	Admitted into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids sent Home.	Average Number Constantly Sick.	Ratio per 1,000 of Strength. Admitted.	Died.	Invalided.	Constantly Sick.	Sick each Soldier. Average Time to	Duration of each Case of Sickness. Average	Stations occupied during the Year.	Completed Years of Service in the Command.
	CEYLON.															
	Royal Artillery.												days.	days.		
87th	Royal Garrison Artillery ...	143	88	7	1	8	3	3·64	615·4	55·94	20·98	25·45	9·29	15·10	Trincomali, 12 months	1
88th	Royal Garrison Artillery ...	155	89	2	—	2	1	5·92	574·2	12·90	6·45	38·19	13·94	24·28	Colombo, 12 months	1
	Other Royal Garrison Artillery...	13	5	—	—	—	—	·20	384·6	—	—	15·38	5·61	14·60	Various	Various.
	Total	311	182	9	1	10	4	9·76	585·2	32·15	12·86	31·38	11·45	19·57		
	Royal Engineers.	94	54	2	—	2	1	2·01	574·5	21·28	10·64	21·38	7·80	13·59	Various stations	Various.
	Infantry Regiments.															
1st	Gloucestershire Regiment ...	6	—	—	—	—	—	·33	—	—	—	55·00	20·07	—	Colombo, 6 days. To India, 6th January	—
2nd	Royal West Kent Regiment ...	881	742	3	—	3	11	38·56	842·2	3·41	12·49	43·77	15·98	18·97	Various stations, 12 months	1
	Other Infantry	3	1	—	—	—	—	·33	333·3	—	—	110·00	40·15	120·45	Various	Various.
	Total	890	743	3	—	3	11	39·22	834·8	3·37	12·36	44·07	16·08	19·27		
	Garrison Staff and Departments.	52	16	—	—	—	2	·44	307·7	—	38·46	8·46	3·09	10·04	Various stations	Various.
	Grand Total	1,347	995	14	1	15	18	51·43	738·7	11·14	13·36	38·18	13·94	18·87		

	South China.															
	Royal Artillery.															
78th	Royal Garrison Artillery ...	197	312	3	—	3	5	19·40	1583·8	15·23	25·38	98·48	35·94	22·69	Hong Kong, 12 months	1
80th	Royal Garrison Artillery ...	176	357	4	—	4	3	19·00	2028·4	22·73	17·05	107·96	39·40	19·42	Hong Kong, 12 months	1
89th	Royal Garrison Artillery ...	178	461	2	1	3	4	24·85	2590·5	16·85	22·47	139·61	50·96	19·67	Hong Kong, 12 months	2
	Total	551	1,130	9	1	10	12	63·25	2050·7	18·15	21·78	114·80	41·90	20·43		
	Royal Engineers.	179	98	1	—	1	1	7·04	547·5	5·59	5·59	39·33	14·35	26·22	Hong Kong, 12 months	Various.
	Infantry Regiments.															
1st	Notts and Derby Regiment ...	368	651	2	—	2	13	36·60	1769·0	5·43	35·33	99·46	36·30	20·52	Hong Kong, 12 months	1
	Royal Welsh Fusiliers (Details)...	—	5	—	—	—	1	·85	—	—	—	—	—	—	—	—
	Total	368	656	2	—	2	14	37·45	1782·6	5·43	38·05	101·77	37·15	20·84		
	Garrison Staff and Departments.	122	112	—	—	—	3	5·15	918·0	—	24·59	42·21	15·41	16·78	Hong Kong, 12 months	Various.
	Grand Total	1,220	1,996	12	1	13	30	112·89	1636·1	10·66	24·59	92·53	33·77	20·64		
	North China.															
	Royal Artillery.	49	43	1	—	1	1	3·25	877·6	20·41	20·41	66·33	24·21	27·59	Peking, 12 months	1
	Royal Engineers.	13	2	—	—	—	—	·18	153·8	—	—	13·85	5·05	32·85	Tientsin, 12 months	1
1st	Notts and Derby Regiment (Det.)	382	316	7	—	7	7	19·02	827·2	18·32	18·32	49·79	18·17	21·97	Peking and Tientsin, 12 months... ...	1
	Garrison Staff and Departments.	28	8	1	—	1	—	·47	285·7	35·71	—	16·79	6·13	21·44	Peking and Tientsin, 12 months... ...	1
	Grand Total	472	369	9	—	9	8	22·92	781·8	19·07	16·95	48·56	17·73	22·67		

Battery, Company, or Battn.	Corps and Commands.	Average Annual Strength.	Admitted into Hospital.	Deaths			Invalids sent Home.	Average Number Constantly Sick.	Ratio per 1,000 of Strength.				Sick Time to each Soldier.	Average Duration of each Case of Sickness.	Stations occupied during the Year.	Completed Years of Service in the Command.
				In the Command.	Of Invalids.	Total.			Admitted.	Died.	Invalided.	Constantly Sick.				
	Straits Settlements.															
	Royal Artillery.												days.	days.		
62nd	Royal Garrison Artillery ...	132	213	1	—	1	8	10·72	1613·6	7·58	60·61	81·21	29·64	18·37	Fort Canning and Blakan Mati and Out Forts during the whole of the year	1
64th	Royal Garrison Artillery ...	132	296	2	—	2	8	15·00	2242·4	15·15	60·61	113·64	41·48	18·50		1
	District Staff, R.G.A.	20	4	—	—	—	—	·14	200·0	—	—	7·00	2·56	12·78		Various.
	Total	284	513	3	—	3	16	25·86	1806·3	10·56	56·34	91·06	33·24	18·40		
	Royal Engineers.	100	148	1	—	1	7	6·44	1480·0	10·00	70·00	64·40	23·51	15·88	Various stations during the year ...	Various.
	Infantry Regiment.															
1st	Manchester Regiment	386	739	8	—	8	4	28·71	1914·5	20·73	10·36	74·38	27·15	14·18	Tanglin, 9 months. From South Africa, 30th March	—
	Garrison Staff and Departments.	43	22	—	—	—	2	·73	511·6	—	46·51	16·98	6·20	12·11	Various	Various.
	Grand Total	813	1,422	12	—	12	29	61·74	1749·1	14·76	35·67	75·94	27·72	15·85		
	Egypt and Cyprus.															
	Cavalry.															
11th	Hussars	128	50	—	—	—	1	4·00	390·6	—	7·81	31·25	11·40	29·20	Cairo, 4 months. To England, 21st April	—
20th	Hussars	324	267	3	—	3	3	16·09	824·1	9·26	9·26	49·66	18·12	22·00	Cairo, 8 months. From South Africa, April 19th	—
	Total	452	317	3	—	3	4	20·09	701·3	6·64	8·85	44·45	16·22	23·13		

	Royal Artillery.															
56th	Royal Field Artillery	165	100	2	—	2	3	7·11	606·1	12·12	18·18	43·09	15·72	25·95	Cairo, 12 months	5
74th	Royal Field Artillery	10	15	—	—	—	1	1·39	1500·0	—	100·00	139·00	50·73	33·82	Cairo, 1 month. To India, 31st January	—
4th	M.B., Royal Garrison Artillery	139	136	1	—	1	4	7·94	978·4	7·19	28·78	57·12	20·85	21·31	Cairo, 11 months. From South Africa, 1st February	—
	Total	314	251	3	—	3	8	16·44	799·4	9·55	25·48	52·36	19·11	23·90		
	Royal Engineers.	101	39	—	—	—	1	2·21	386·1	—	9·90	21·88	7·99	20·68	——	Various.
	Infantry Regiments.															
3rd	Royal Fusiliers	841	862	4	1	5	10	46·41	1025·0	5·95	11·89	55·18	20·14	19·65	Cairo and Khartum, 10½ months. To Bermuda, 12th November	—
2nd	Leicester Regiment	14	4	—	—	—	—	·41	285·7	—	—	29·29	10·69	37·41	Alexandria, 1 month. To England, 31st January	—
2nd	Royal Inniskilling Fusiliers ...	146	89	—	—	—	—	3·58	609·6	—	—	24·52	8·95	14·68	Cairo, 1½ months. From South Africa, 10th November	—
2nd	Royal Berkshire Regiment ...	916	625	5	—	5	23	46·16	682·3	5·46	25·11	50·39	18·39	26·96	Alexandria, 12 months	1
1st	Highland Light Infantry ...	686	580	5	—	5	3	29·22	845·5	7·29	4·37	42·59	15·55	18·39	Cairo and Khartum, 11 months. From South Africa, 1st February	—
1st	Seaforth Highlanders	94	99	—	—	—	3	6·00	1053·2	—	31·91	63·83	23·30	22·12	Cairo, 1 month. To India, 31st January	—
2nd	Cameron Highlanders	15	28	—	—	—	—	1·03	1866·7	—	—	68·66	25·06	13·43	Cyprus, 2 months. To Malta, 4th March	—
1st	Royal Dublin Fusiliers	80	88	—	—	—	—	4·19	1100·0	—	—	52·37	19·12	17·37	Cyprus, 10 months. From Malta, 4th March	—
2nd	Rifle Brigade	870	543	1	—	1	16	33·70	624·1	1·15	18·39	38·73	14·14	22·65	Cairo, 12 months	1
	Mounted Infantry...	121	90	—	—	—	—	5·17	743·8	—	—	42·73	15·59	20·97	Cairo	Various.
	Other Infantry	—	—	—	—	—	1	·08	—	—	—	—	—	—	——	—
	Total	3,783	3,008	15	1	16	56	175·95	795·1	4·23	14·80	46·51	16·98	21·35		

(1954) A 2

Battery, Company, or Battn.	Corps and Commands.	Average Annual Strength.	Admitted into Hospital.	Deaths. In the Command.	Deaths. Of Invalids.	Deaths. Total.	Invalids sent Home.	Average Number Constantly Sick.	Ratio per 1,000 of Strength. Admitted.	Ratio per 1,000 of Strength. Died.	Ratio per 1,000 of Strength. Invalided.	Ratio per 1,000 of Strength. Constantly Sick.	Sick Average Time to each Soldier.	Duration of each Case of Sickness.	Stations occupied during the Year.	Completed Years of Service in the Command.
	EGYPT AND CYPRUS—*contd.*															
	Garrison Staff and Departments.												days.	days.		
	Army Service Corps	77	15	1	—	1	—	1·00	194·8	12·99	—	12·99	4·74	24·33	Various	Various.
	Royal Army Medical Corps ...	103	43	2	—	2	1	1·79	417·5	19·42	9·71	17·38	6·34	15·19	Various	Various.
	Army Ordnance Corps	43	9	—	—	—	—	·75	209·3	—	—	17·44	6·36	30·42	Various	Various.
	Army Pay Corps	12	1	—	—	—	1	·33	83·3	—	83·33	27·50	10·04	120·46	Various	Various.
	Military Police	63	22	—	—	—	—	1·58	349·2	—	—	25·08	9·15	26·21	Various	Various.
	Garrison Staff	6	3	—	—	—	1	·25	500·0	—	166·67	41·67	15·21	30·42	Various	Various.
	Total	304	93	3	—	3	3	5·70	305·9	9·87	9·87	18·75	6·84	22·37		
	Grand Total	4,954	3,708	24	1	25	72	220·39	748·5	5·05	14·53	44·49	16·24	21·69		

ABSTRACT No. XXXV.

ABSTRACT No. XXXV.—TABLE showing the ADMISSIONS, MORTALITY, and INVALIDING in each CORPS serving in INDIA during the Year 1903.

Corps.	Average Annual Strength.	Admitted into Hospital.	Deaths in the Command.	Invalided.	Average Daily Sick.	Ratio per 1,000 of Strength.				Average Sick Time to each Soldier.	Average Duration of each Case of Sickness.	Stations occupied during the Year.	Years of Service in India.
						Admissions into Hospital.	Deaths.	Invalids.	Average Daily Sick.				
CAVALRY.										days.	days.		Yrs. ms.
4th Dragoon Guards	600	646	9	10	40·43	1076·7	15·00	16·67	67·38	24·59	22·84	Delhi Coronation Durbar and manœuvres, ½ month; Muttra, 11½ months.	9 2
5th ,, ,, ...	613	610	14	18	48·31	995·1	22·84	29·36	78·81	28·77	28·91	Lucknow, 12 months	7 8
6th ,, ,, ...	614	599	4	7	43·73	975·6	6·51	11·40	71·22	26·00	26·65	Bangalore, 12 months	1 4
3rd Hussars	590	526	8	14	30·98	891·5	13·56	23·73	52·51	19·17	21·50	Sialkot, 11½ months; Rawal Pindi manœuvres, ½ month.	4 4
4th ,, ...	617	701	3	24	39·17	1136·1	4·86	38·90	63·48	23·17	20·40	Secunderabad, 12 months	7 2
9th Lancers	634	785	8	13	43·26	1238·2	12·62	20·50	68·23	24·91	20·11	Delhi Coronation Durbar and manœuvres, 2 months; Rawal Pindi, 9½ months; Rawal Pindi manœuvres, ½ month.	3 0
10th Hussars...	601	992	16	24	56·61	1650·6	26·62	39·93	94·19	34·38	20·83	Mhow, 12 months	1 2
12th Lancers...	623	775	15	14	56·76	1244·0	24·08	22·47	91·11	33·25	26·73	Umballa, 12 months	1 2
18th Hussars...	615	672	19	24	46·47	1092·7	30·89	39·02	75·56	27·58	25·24	Delhi Coronation Durbar and manœuvres, ½ month; Meerut, 11½ months; Dett. Chakrata, 10 months.	4 2
Total	5,507	6,306	96	148	405·72	1145·1	17·43	26·87	73·67	26·89	23·48		

ARTILLERY.														
D Battery, R.H.A.	143	122	2	5	8·58	853·1	13·99	34·97	60·00	21·90	25·67	Delhi Coronation Durbar and manœuvres, 1 month; Umballa, 10 months; marching 1 month.	5	1
E ,, ,, ...	151	194	2	4	8·49	1284·8	13·25	26·49	56·23	20·52	15·97	Mhow, 12 months	4	2
F ,, ,, ...	138	153	3	2	8·36	1108·7	21·74	14·49	60·58	22·11	19·94	Rawal Pindi, 9½ months; Practice camps, 2½ months ...	8	3
G ,, ,, ...	165	125	—	2	8·47	757·6	—	12·12	51·33	18·74	24·73	Bangalore, 12 months	1	4
H ,, ,, ...	145	93	3	7	6·80	641·4	20·69	48·28	46·90	17·12	26·69	Delhi Coronation Durbar and manœuvres, ½ month; Meerut, 10½ months; Practice camp, 1½ month.	14	2
I ,, ,, ...	144	126	—	3	7·17	875·0	—	20·83	49·79	18·17	20·77	Delhi Coronation Durbar and manœuvres, 1 month; Umballa, 10½ months; marching, ½ month.	10	2
J ,, ,, ...	120	120	8	3	8·30	1000·0	66·67	25·00	69·17	25·25	25·25	Meerut, 9½ months; Practice camp, 2 months; Rawal Pindi, ½ month.	3	4
K ,, ,, ...	158	108	8	—	5·47	683·5	50 63	—	34·62	12·64	18·49	Sialkot, 9½ months; Meerut, 2½ months	12	2
L ,, ,, ...	139	113	—	5	8·08	812·9	—	35·97	58·13	21·22	26·10	Secunderabad, 12 months	11	2
O ,, ,, ...	145	145	3	1	9·67	1000·0	20·69	6·90	66·69	24·34	24·34	Lucknow, 10 months; Practice camp, 2 months	1	1
P ,, ,, ...	135	175	2	4	8·41	1296·3	14·81	29·33	62·30	22·74	17·54	Mhow, 12 months	1	1
1st Battery, R.F.A.	163	153	1	5	7·78	938·6	6·13	30·67	47·73	17·42	18·56	Ahmedabad, 11 months; Practice camp, 1 month ...	8	0
3rd ,, ,, ...	133	180	6	2	8·93	1353·4	45·11	15·04	67·14	24·51	18·11	Campbellpore, 2 months; Peshawar, 9 months; Practice camp, 1 month	7	3
6th ,, ,, ...	155	201	—	2	13·1	1296 8	—	12·90	86·52	31·58	24·35	Secunderabad, 12 months	12	2
7th ,, ,, ...	212	413	8	2	23·17	1948·1	37·74	9·43	109·29	39·89	20·48	Jhansi, 11½ months; Practice camp, ½ month	1	2
11th ,, ,, ...	156	154	1	1	8·87	987·2	6·41	6·41	56·86	20·75	21·02	Jubbulpore, 10 months; Practice camp, 2 months ...	6	1
12th ,, ,, ...	166	114	1	7	9·74	686·7	6·02	42·17	58·67	21·42	31·18	Bangalore, 12 months	3	8
13th ,, ,, ...	165	336	2	8	10·90	2036·4	12·12	48·48	66·06	24·11	11·84	Delhi Coronation Durbar and manœuvres, 1½ months; Mian Mir, 8½ months; Practice camp, 1½ months; marching, 1 month.	2	2
14th ,, ,, ...	20	329	8	3	16·63	1636·8	39·80	14·93	82·74	30·20	18·45	Cawnpore, 11½ months; Practice camp, ½ month ...	1	2
16th ,, ,, ...	155	231	2	—	12·17	1490·3	12·90	—	78·52	28·66	19·23	Practice camp, 1 month; Mhow, ½ month; Neemuch, 9½ months; marching, 1 month.	7	11
18th ,, ,, ...	168	189	1	3	12·59	1125·0	5·95	17·86	74·94	27·35	24·31	Kirkee, 12 months	2	1
23rd ,, ,, ...	179	205	—	2	13·84	1145·3	—	11·17	77·32	28·22	24·64	Secunderabad, 12 months	12	2

Corps.	Average Annual Strength.	Admitted into Hospital.	Deaths in the Command.	Invalided.	Daily Average Sick.	Ratio per 1,000 of Strength. Admissions into Hospital.	Deaths.	Invalids.	Average Daily Sick.	Average sick time to each Soldier.	Average Duration of each Case of Sickness.	Stations occupied during the year.	Years of Service in India.
ARTILLERY—*cont.*										days.	days.		Yrs. ms.
24th Battery, R.F.A	156	112	—	3	7·20	717·9	—	19·23	46·15	16·85	23·46	Delhi Coronation Durbar and manœuvres, ½ month; Meerut, 10 months; Practice camp, 1½ months.	13 2
25th ,, ,, ...	162	292	3	2	21·87	1802·5	18·52	12·35	135·00	49·27	27·34	Beltary, 12 months	6 1
29th ,, ,, ...	155	184	2	6	12·36	1187·1	12·90	38·71	79·74	29·11	24·52	Kirkee, 12 months	10 2
30th ,, ,, ...	141	159	2	9	9·19	1127·7	14·18	63·83	65·18	23·79	21·10	Peshawar, 1½ months; Rawal Pindi 8 months; Practice camp, 2½ months.	7 2
31st ,, ,, ...	166	102	1	3	5·48	614·5	6·02	18·07	33·01	12·05	10·61	Bangalore, ½ month; Belgaum, 10 months; marching, 1½ months.	15 2
32nd ,, ,, ...	150	264	2	20	16·23	1760·0	13·33	133·33	108·33	39·54	22·47	Deesa, 11 months; Practice camp, 1 month	5 1
33rd ,, ,, ...	171	220	1	9	13·53	1286·5	5·85	52·63	79·42	28·99	22·53	Hyderabad, 2½ months; Karachi, 9½ months	12 2
34th ,, ,, ...	140	138	—	4	4·00	985·7	—	28·57	28·57	10·43	10·58	Delhi Coronation Durbar and manœuvres, ½ month; Campbellpore, 7½ months; Bareilly, ½ month; Practice camp, ½ month; marching, 2½ months.	13 2
35th ,, ,, ...	180	121	1	3	8·29	672·2	5·56	16·67	46·06	16·81	25·01	Practice camp, ½ month; Bangalore, ½ month; St. Thomas' Mt., 10½ months; marching, ½ month.	15 2
40th ,, ,, ...	167	160	1	4	8·90	958·1	5·99	23·95	53·29	19·45	20·30	Kirkee, 12 months	10 2
41st ,, ,, ...	145	230	4	8	11·08	1586·2	27·59	55·17	76·41	27·89	17·58	Practice camp, 1 month; Mhow, ½ month; Nasirabad, 9½ months; marching, 1 month.	8 2
45th ,, ,, ...	167	127	2	4	7·77	760·5	11·98	23·95	46·53	16·93	22·33	Kirkee, 12 months	10 2
46th ,, ,, ...	125	273	14	10	9·78	2184·0	112·00	80·00	78·24	28·56	13·06	Delhi Coronation Durbar and manœuvres, 1 month; Mian Mir, 8½ months; Practice camp, 2½ months.	13 2
47th ,, ,, ...	138	219	2	11	13·41	1587·0	14·49	79·71	97·17	35·47	22·35	Karachi, 2½ months; Hyderabad, 9½ months	12 1
49th ,, ,, ...	169	188	3	3	13·44	1112·4	17·75	17·75	79·53	29·03	26·00	Secunderabad, 12 months	12 2
51st ,, ,, ...	134	139	3	7	7·00	1037·3	22·39	52·24	52·24	19·07	18·38	Delhi Coronation Durbar and manœuvres, 1 month; Ferozepore, 9½ months; Practice camp, 1½ months.	13 2
52nd ,, ,, ...	150	168	2	2	8·02	1120·0	13·33	13·33	53·47	19·52	17·42	Jubbulpore, 10 months; Practice camp, 2 months ...	6 2

54th	,,	,,	...	...	151	164	3	5	7·63	1086·1	19·87	33·11	50 53	18·44	16·98	Delhi Coronation Durbar and manœuvres, 1 month; Agra, 9 months; Practice camp, ½ month; Campbellpore, ½ month; marching, 1 month.	13 2
56th	,,	,,	...	...	165	145	1	5	10·12	878·8	6·06	30·30	61·33	22·39	25·47	S. Thomas' Mt., 12 months	15 2
57th	,,	,,	...	...	152	177	3	2	8·53	1164·5	19·74	13·16	56·12	20·48	17·59	Rawal Pindi, 10½ months; Practice camp, 1½ months ...	7 1
58th	,,	,,	...	...	168	142	2	4	9·09	845·2	11·90	23·81	54·11	19·75	23·37	Bangalore, 12 months	5 1
62nd	,,	,,	...	...	160	237	2	3	12·46	1481·3	12·50	18·75	77·87	28·42	19·19	Kamptee, 10 months; Kirkee, ½ month; Practice camp, 1½ months.	2 0
63rd	,,	,,	...	...	142	160	4	5	11·56	1126·8	28·17	35·21	81·41	29·71	26·37	Allahabad, 10 months; Practice camp, 2 months ...	1 2
64th	,,	,,	...	...	136	294	6	12	15·84	2161·8	44·12	88·24	116·47	42·51	19·67	Barrackpore, 12 months	1 2
66th	,,	,,	...	...	220	323	7	6	21·82	1468·2	31·82	27·27	99·18	36·20	24·66	Jhansi, 11½ months; Practice camp, ½ month	1 2
67th	,,	,,	...	...	162	152	1	6	8·91	938·3	6·17	37·04	55·00	20·07	21·40	Delhi Coronation Durbar and manœuvres, 1 month; Jullundur, 8½ months; Practice camp, 1 month; marching, 1½ months.	2 1
69th	,,	,,	...	...	151	145	2	3	7·24	960·3	13·25	19·87	47·95	17·50	18·22	Delhi Coronation Durbar and manœuvres, 1 month; Multan, 9½ months; marching, 1½ months.	2 1
72nd	,,	,,	...	...	163	143	4	6	9·02	877·3	24·54	36·81	55·34	20·20	23·02	Delhi Coronation Durbar and manœuvres, 1 month; Meerut, 10½ months; marching, ½ month.	15 2
73rd	,,	,,	...	...	130	161	2	1	8·85	1238·5	15·38	7·69	68·08	24·85	20·06	Dinapore, 10½ months; Practice camp, 1½ months ...	1 2
74th	,,	,,	...	...	135	159	1	3	10·47	1177·8	7·41	22·22	77·56	28·31	24·03	Lucknow, 10 months; Practice camp, 2 months ...	1 2
75th	,,	,,	...	...	154	142	--	5	10·50	922·1	—	32·47	68·18	24·89	26·99	Ahmednagar, 11½ months; Kirkee, ½ month; marching, ½ month.	2 0
77th	,,	,,	...	...	155	129	2	5	9·18	832·3	12·90	32·26	59·23	21·62	25·97	Fyzabad, 9½ months; Practice camp, 2½ months ...	1 2
79th	,,	,,	...	...	151	180	1	5	8·99	1192·1	6·62	33·11	59·54	21·73	18·23	Practice camp, 2 months; Bareilly, 8 months; Cawnpore, ½ month marching, 1½ months.	1 2
80th	,,	,,	...	...	139	148	—	8	8·47	1064·7	—	57·55	60·94	22·24	20·89	Practice camp, 2 months; Saugor, 10 months	7 1
8th Ammunition Column...				...	44	85	1	—	3·92	1931·8	22·73	—	89·09	32·52	16·83	Jhansi, 10½ months. (Raised on the 13th February, 1903.)	0 10
No. 1 Battery, Mtn. Div., R.G.A.					110	122	3	4	5·77	1109·1	27·27	36·36	52·45	19·15	17·26	Quetta, 9½ months; marching, 2½ months	20 2
,, 2	,,	,,	,,	,,	87	59	1	3	3·34	678·2	11·49	34·48	38·39	14·01	20·66	Rawal Pindi, 4½ months; Kalabagh, 6 months; Practice camp, ½ month; marching, 1½ months.	17 11
,, 3	,,	,,	,,	,,	96	68	2	2	3·22	706·3	20·83	20·83	33·54	12·24	17·28	Rawal Pindi, 5 months; Bara Gali, 5½ months; Practice camp, ½ month; marching, 1 month.	25 1
,, 5	,,	,,	,,	,,	101	39	1	—	2·41	386·1	9·90	—	23·86	8·71	22·56	Umballa, 3 months; Jutogh, 7 months; marching, 2 months.	25 1

Corps.	Average Annual Strength.	Admitted into Hospital.	Deaths in the Command.	Invalided.	Average Daily Sick.	Ratio per 1,000 of Strength.				Sick to each Soldier.	Average Duration of each Case of Sickness.	Stations occupied during the Year.	Years of Service in India.
						Admissions into Hospital.	Deaths.	Invalids.	Average Daily Sick.	Average Time			
ARTILLERY—*cont.*										days.	days.		Yrs. ms.
No. 7 Battery, Mtn. Div., R.G.A.	110	82	1	6	4·15	745·5	9·09	54·55	37·73	13·77	18·47	Delhi Coronation Durbar and manœuvres, ½ month; Umballa, 3½ months; Jutogh, 7 months; marching, 1½ months.	17 10
,, 8 ,, ,, ,, ,,	117	116	—	3	6·50	991·5	—	25·64	55·56	20·28	20·45	Quetta, 11 months; marching, 1 month.	16 2
,, 9 ,, ,, ,, ,,	123	95	4	3	6·67	772·4	32·52	24·39	54·23	19·79	25·63	Quetta, 12 months	19 2
No. 39 Company R.G.A.	13	9	1	4	·83	692·3	76·92	307·69	63·85	23·30	33·66	Aden, 2½ months (left with Aden Column Field Force on the 7th March).	8 0
,, 41 ,, ,, ...	12	11	—	9	1·08	916·7	—	750·00	90·00	32·85	35·84	Aden, 2½ months (left with Aden Column Field Force on the 7th March).	16 2
,, 42 ,, ,, ...	139	145	1	3	10·38	1043·2	7·19	21·58	74·68	27·26	26·13	Delhi Coronation Durbar and manœuvres, ½ month; Roorkee, 9½ months; Practice camp, 2 months.	16 2
,, 43 ,, ,, ...	88	72	1	2	4·10	818·2	11·36	22·73	46·59	17·01	20·78	Multan, 12 months	16 2
,, 45 ,, ,, ...	69	127	2	17	9·26	1840·6	28·99	246·38	134·20	48·98	2[illegible]·61	Aden, 12 months	16 2
,, 51 ,, ,, ...	131	124	3	3	6·16	946·6	22·90	22·90	47·02	17·16	18·13	Delhi Coronation Durbar and manœuvres, ½ month; Roorkee, 9½ months; Practice camp, 2 months.	4 11
,, 52 ,, ,, ...	158	149	2	5	13·37	943·0	12·66	31·65	84·62	30·89	32·75	Madras, 12 months; Dett Wellington, 7 months ...	1 11
,, 53 ,, ,, ...	138	121	1	3	5·72	876·8	7·25	21·74	41·45	15·13	17·25	Bombay, 12 months	15 0
,, 54 ,, ,, ...	125	162	—	4	8·91	1296·0	—	32·00	71·28	26·02	20·07	Fort Attock, ½ month; Aden, 10½ months; marching, ½ month.	15 0
,, 55 ,, ,, ...	126	159	4	5	8·42	1261·9	31·75	39·68	66·83	24·39	19·33	Fort Attock ½ month; Aden, 10½ months; marching, ½ month.	1 11
,, 59 ,, ,, ...	106	110	—	10	5·19	1037·7	—	94·34	48·96	17·87	17·22	Ferozepore, 12 months; Dett Dalhousie, 7 months ...	6 0
,, 60 ,, ,, ...	135	116	1	5	8·91	859·3	7·41	37·04	66·00	24·09	28·04	Bombay, 12 months	1 9
,, 61 ,, ,, ...	132	169	—	7	10·02	1280·3	—	53·03	75·91	27·71	21·64	Rangoon, 12 months	5 3
,, 65 ,, ,, ...	127	129	—	2	8·41	1015·7	—	15·75	66·22	24·17	23·80	Agra, 7½ months Karachi, 4½ months	11 2

No. 69 Company R.G.A.	140	94	2	4	6·11	671·4	14·29	28·57	43·64	15·93	28·73	Karachi, 12 months	9	3
„ 70 „ „	131	177	2	14	13·59	1351·1	15·27	106·87	103·74	37·87	28·02	Rangoon, 12 months	9	2
„ 71 „ „	91	76	3	1	3·81	835·2	32·97	10·99	41·87	15·28	18·40	Delhi Coronation Durbar and Manœuvres, 1½ months; Nowgong, 8½ months; Practice camp, 1½ months; marching, 1 month.	9	2
„ 72 „ „	81	75	2	1	6·73	925·9	24·69	12·35	83·09	30·33	32·75	Delhi Coronation Durbar and Manœuvres, 1½ months; Nowgong, 9½ months; marching, 1½ months.	9	2
„ 73 „ „	140	8	2	11	6·65	557·1	14·29	78·57	47·50	17·34	31·12	Quetta, 12 months	9	2
„ 74 „ „	119	76	—	2	3·60	638·7	—	16·81	30·25	11·04	17·29	Fort Attock, 4½ months; Camp Thobba, 1½ months; Khyra Gali, 3½ months; marching, ½ month (arrived from Egypt on the 24th February).	0	10
„ 75 „ „	127	126	1	11	7·55	992·1	7·87	86·61	59·45	21·70	21·87	Fort Chingrikhal, 1½ months; Fort Allahabad, 10½ months.	7	0
„ 76 „ „	143	92	4	7	6·31	643·4	27·97	48·95	44·13	16·11	25·03	Bombay, 12 months	2	11
„ 79 „ „	146	157	1	5	9·79	1075·3	6·85	34·25	67·05	24·47	22·76	Fort Chingrikhal, 1½ months; Calcutta, 10½ months ...	2	1
„ 82 „ „	141	132	1	5	9·03	936·2	7·09	35·46	64·04	23·38	24·97	Quetta, 12 months	1	10
„ 85 „ „	106	138	2	6	7·85	1301·9	18·87	56·60	74·06	27·03	20·76	Fort Chingrikhal, 1½ months; Barrackpore, 1 month; Darjeeling, 8½ months; Calcutta, 1½ months.	1	9
„ 86 „ „	128	60	3	1	5·20	468·8	23·44	7·81	40·63	14·83	31·63	Rawal Pindi, ½ month; Fort Attock, 5½ months; camp Thobba, 5½ months; marching, ½ month.	1	2
„ 90 „ „	94	67	—	4	2·97	712·8	—	42·55	31·60	11·53	16·18	Campbellpore, 12 months	4	1
„ 91 „ „	120	129	2	8	8·51	1075·0	16·67	66·67	70·92	25·88	24·08	Delhi Coronation Durbar and Manœuvres, ½ month; Roorkee, 10½ months; Practice camp, ½ month; marching ½ month.	2	4
„ 94 „ „	122	267	3	7	10·57	2188·5	24·59	57·38	86·64	31·62	14·43	Delhi, 10 months; Roorkee, 1 month; Practice camp, 1 month.	1	2
„ 104 „ „	142	153	1	5	8·31	1077·5	7·04	35·21	58·52	21·36	19·82	Delhi Coronation Durbar and Manœuvres, ½ month; Rawal Pindi, 5½ months; Camp Thobba, 1½ months; Khyra Gali, 3½ months; Practice camp, ½ month.	2	1
Total	12,944	14,242	203	455	835·45	1100·3	15·68	35·15	64·54	23·56	21·41			
ENGINEERS.														
5 Company, Royal Engineers ...	153	59	4	3	4·91	385·6	26·14	19·61	32·09	11·71	30·38	Calcutta, Roorkee, Bangalore, Rangoon, Kirkee, Bombay, Karachi, and Aden.	36	0

Corps.	Average Annual Strength.	Admitted into Hospital.	Deaths in the Command.	Invalided.	Average Daily Sick.	Ratio per 1,000 of Strength.				Sick to each	Average Duration of each Case of Sickness.	Stations occupied during the year.	Years of Service in India.
						Admissions into Hospital.	Deaths.	Invalids.	Average Daily Sick.	Average Time to Soldier.			
INFANTRY.										days.	days.		Yrs. ms.
2nd Royal Scots	998	1,406	16	16	70·76	1408·8	16·03	16·03	70·90	25·88	18·37	Poona, 1⅝ months: Kamptee, 10½ months; Dett. Satara, 7 months; Sitabaldi, 10 months.	11 9
1st Royal West Surrey Regiment	969	1,080	16	22	51·64	1114·6	16·51	22·70	53·29	19·45	17·45	Peshawar, 6 months; Cherat, 5½ months; Practice camp, ⅜ month.	8 11
1st East Kent Regiment	1,047	1,112	14	25	64·45	1062·1	13·37	23·88	61·56	22·47	21·15	Poona, 9½ months; Aden, 2½ months; Dett. Kirkee, 8 months.	16 9
1st Royal Lancaster Regiment ...	152	219	1	—	12·20	1440·8	6·58	—	80·26	29·30	20·33	Calcutta, 2⅞ months; (arrived from Malta on the 10th October).	0 3
1st Royal Warwickshire Regt. ...	979	1,090	8	37	55·29	1113·4	8·17	37·79	56·48	20·61	18·51	Belgaum, 12 months	5 2
1st Royal Fusiliers	1,073	953	14	61	62·41	888·2	13·05	56·85	58·16	21·23	23·90	Mandalay, 8½ months; Maymyo, 1⅝ months; Calcutta, 1½ months; Sea voyage, ¾ month; Detts. Wellington, 12 months; Thayetmyo, 5 months; Shwebo, 1½ months; Dum Dum, 1¼ months; Barrackpore, 1¼ months.	16 0
1st Liverpool Regiment	674	1,199	14	17	78·98	1778·9	20·77	25·22	117·18	42·77	24·04	Rangoon, 12 months; Dett. Port Blair, 12 months ...	1 1
1st Norfolk Regiment	927	820	5	29	53·11	884·6	5·39	31·28	57·29	20·91	23·64	Delhi Coronation Durbar and manœuvres, 1 month; Bareilly, 11 months.	14 10
1st Lincolnshire Regiment ...	1,012	1,026	8	42	78 22	1013·8	7·91	41·50	77·29	28·21	27·83	Secunderabad, 12 months; Detts. Wellington, 12 months: Trichinopoly, on guard-duty with Boer prisoners, 1½ months.	5 2
1st Devonshire Regiment... ...	1,048	667	4	19	47·91	636·4	3·82	18·13	45·72	16·69	26·22	Shahjehanpur, 3½ months; Chaubuttia, 8 months; marching, ½ month; Wing Bareilly, 1 month; Dett. Ranikhet, 2 months.	8 7
2nd Suffolk Regiment	1,117	1,145	4	61	69·19	1025·1	3·58	54·61	61·94	22·61	22·06	Karachi, 12 months; Dett. Hyderabad, 12 months ...	12 10
1st Somersetshire Light Infantry	967	956	20	29	48·14	988·6	20·68	29·99	49·78	18·17	18·38	Peshawar, 12 months; Dett. Khanspur, 5 months; Cherat 5 months.	10 0
1st West Yorkshire Regiment ...	893	607	10	17	43·46	679·7	11·20	19·04	48·67	17·76	26·13	Quetta, 12 months	4 11
1st East Yorkshire Regiment ...	798	1,004	13	48	64·48	1258·1	16·29	60·15	80·80	29·49	23·44	Shwebo, 12 months; Dett. Bhamo, 10½ months; Mandalay, 1⅔ months.	8 1

1st Bedfordshire Regiment ...	877	975	18	17	60·83	1111·7	20·52	19·38	69·36	25·32	22·77	Delhi Coronation Durbar and manœuvres, ½ month; Jhansi, 11½ months; Detts. Nowgong, 11 months; Ranikhet, 7 months; Chakrata, 9 months.	13 0
1st Leicestershire Regiment ...	677	1,031	10	20	79·94	1522·9	14·77	29·54	118·08	43·10	28·30	Madras, 12 months; Wing Bellary, 12 months	1 1
2nd Royal Irish Regiment... ...	70	90	2	9	6·11	1285·7	28·57	128·57	87·29	31·86	24·78	Kamptee, 1½ months (left for England on the 19th February).	18 0
2nd Yorkshire Regiment	990	1,093	19	23	59·95	1104·0	19·19	23·23	60·56	22·10	20·02	Delhi Coronation Durbar and manœuvres, ½ month; Cawnpore, 10⅝ months; marching, 1 month; Dett. Fatehgarh, 11½ months.	13 11
1st Royal Scots Fusiliers	786	801	11	28	49·87	1019·1	13·99	35·62	63·45	23·16	22·72	Allahabad, 12 months; Detts. Benares, 12 months ...	7 2
1st Cheshire Regiment	969	670		26	44·84	691·4	8·26	26·83	46·27	16·89	24·43	Quetta, 9½ months; Bombay, 2½ months; marching, ½ month; Dett. Deesa, 2⅝ months; Ahmedabad, 2⅝ months; Deolali, 2⅝ months.	16 2
2nd Royal Welsh Fusiliers ...	669	551		13	34·92	823·6	8·97	19·43	52·20	19·05	23·13	Meerut, 4 months; Chakrata, 7 months; marching, 1 month.	1 1
1st South Wales Borderers ...	1,019	1,392	15	23	65·38	1366·0	14·72	22·57	64·16	23·42	17·14	Delhi Coronation Durbar and Manœuvres, 1 month; Mian Mir, 4½ months; Dalhousie, 6 months; marching, ½ month; Dett. Fort Lahore, 10⅝ months; Amritsar, 1½ months.	6 0
2nd King's Own Scottish Borderers.	952	1217	30	39	71·80	1278·4	31·51	40·97	75·42	27·53	21·53	Dinapore, 11 months; Maymyo, ½ month, Sea Voyage, ⅝ month; Detts. Dum Dum, 11 months; Barrackpore, 11 months: Mandalay, 2 months.	13 11
1st Scottish Rifles	889	669	8	30	39·96	752·5	9·00	33·75	44·95	16·41	21·80	Nowshera, 12 months; Detts. Khanspur, 5 months; Fort Attock, 12 months.	9 0
1st Gloucestershire Regiment ...	845	672	10	14	52·95	795·3	11·83	16·57	62·66	22·87	28·76	Lucknow, 11½ months (arrives from Ceylon on the 17th January).	1 0
2nd East Lancashire Regiment ...	892	825	6	25	50·19	924·9	6·73	28·03	56·27	20·54	22·21	Jullundur, 9½ months: Poona, 2⅝ months; Detts. Dagshai, 1 month; Amritsar, 9 months; Dalhousie, 5⅝ months; Khanspur, 5 months.	6 2
2nd East Surrey Regiment ...	965	758	7	22	57·16	785·5	7·25	22·80	59·23	21·62	27·52	Lucknow, 11 months (arrived from South Africa on the 1st February).	0 11
2nd West Riding Regiment ...	860	628		27	49·46	730·2	12·79	31·39	57·51	20·99	28·75	Calcutta, 2 months; Lebong, 10 months; Dett. Darjeeling, 10 months.	6 0
2nd Border Regiment	955	982	7	16	73·58	1028·3	7·33	16·75	77·05	25·12	27·35	Thayetmyo, 12 months; Wing. Meiktila, 12 months ...	13 10
1st Royal Sussex Regiment ...	941	598	5	15	36·37	635·5	5·31	15·94	33·65	14·11	22·20	Sitapur, 4½ months; Ranikhet, 7 months; marching, ½ month; Dett. Main Mir, 1½ months; Sitapur, 7⅛ months.	1 2
1st Hampshire Regiment	331	596	6	48	27·13	1800·6	18·13	145·01	81·96	29·92	16·61	Lucknow, ⅝ month; Aden, ½ month; marching, ⅝ month (left with Aden column Field Force on the 28th February).	17 11
2nd South Staffordshire Regiment	982	1,214	14	34	60·53	1236·3	14·26	34·62	61·64	22·50	18·20	Agra, 12 months; Dett. Chakrata, 8 months	8 2
1st Dorsetshire Regiment... ...	991	1,084		30	59·88	1093·8	3·03	30·27	60·42	22·05	20·16	Ferozepore, 5½ months; Dalhousie, 6½ months	10 3

Corps.	Average Annual Strength.	Admitted into Hospital.	Deaths in the Command.	Invalided.	Average Daily Sick.	Ratio per 1,000 of Strength.				Sick to each	Average Duration of each Case of Sickness.	Stations occupied during the year.	Years of Service in India.
						Admissions into Hospital.	Deaths.	Invalids.	Average Daily Sick.	Average Time to each Soldier.			
INFANTRY—*cont.*										days.	days.		Yrs. ms.
1st South Lancashire Regiment ...	587	661	13	5	38·10	1126·1	22·15	8·52	64·91	23·69	21·04	Jubbulpore, 10½ months (arrived from South Africa on the 14th February); Dett. Saugor, 10½ months.	0 11
2nd South Lancashire Regiment	100	82	2	19	5·08	820·0	20·00	190·00	50·80	18·54	22·61	Jubbulpore, 1½ months (left for England on the 10th February); Dett. Saugor, ½ month.	7 11
2nd Welsh Regiment	832	618	10	21	38·08	742·8	12·02	25·24	45·77	16·71	22·49	Delhi Coronation Durbar and manœuvres, 1 month; Umballa, 2 months; Subathu, 5½ months; Quetta, 3 months; marching, ½ month.	11 3
2nd Royal Highlanders	839	803	12	6	46·15	957·1	14·30	7·15	55·01	20·08	20·98	Umballa, 12 months; Wing Solon, 6¾ months; Dett. Dagshai 6¾ months.	1 2
1st Oxfordshire Light Infantry ...	164	155	3	—	7·55	945·1	18·29	—	46·04	16·80	17·78	Umballa, 2½ months (arrived from England on the 23rd October); Dett. Subathu, 2 months.	0 2
2nd Oxfordshire Light Infantry...	783	914	4	23	56·11	1167·3	5·11	29·37	71·66	26·16	22·41	Bombay, 1½ months; Poona, 8 months; marching, ½ month (left for England on the 23rd October); Dett. Deolali, 1 month.	17 7
1st Essex Regiment	1,043	1,059	6	21	68·75	1015·3	5·75	20·13	65·92	24·06	23·70	Bangalore, 12 months; Dett. Wellington, 12 months	1 4
1st Northamptonshire Regiment...	820	874	6	22	55·51	1065·9	7·32	26·83	67·70	24·71	23·18	Delhi Coronation Durbar and manœuvres, 1 month; Umballa, 2 months; Dagshai, 6½ months; Jullundur, 2 months; marching, ½ month; Dett. Dagshai, 5½ months.	11 2
1st Shropshire Light Infantry ...	92	66	—	11	5·08	717·4	—	119·57	61·74	22·52	31·41	Poona, 1⅞ months (left for England on the 18th February).	8 1½
2nd Shropshire Light Infantry ...	964	833	18	15	47·04	864·1	18·67	15·56	48·80	17·31	20·61	Bareilly, 2 months; Ranikhet, 8½ months; marching, ½ month (arrived from Natal on the 3rd February).	0 11
1st Middlesex Regiment	1,022	1,089	7	26	74·47	1065·6	6·85	25·44	72·87	26·60	24·96	Secunderabad, 12 months; Dett. Wellington, 12 months.	5 9
2nd King's Royal Rifle Corps ...	1,040	810	4	19	43·95	778·8	3·85	18·27	42·26	15·42	19·80	Delhi Coronation Durbar and manœuvres, ⅔ month; Rawal Pindi, 5 months; Kuldana, 6 months; marching, ½ month.	3 4
1st Wiltshire Regiment	1,032	810	9	27	51·92	784·9	8·72	26·16	50·31	18·36	23·40	Rawal Pindi, 12 months; Wing Upper Topa, 6 months	8 3

1st North Staffordshire Regiment	823	835	4	36	60·91	1014·6	4·86	43·74	74·01	27·01	26·63	Delhi Coronation Durbar and manœuvres, 1 month; Jhansi, ¾ month; Bombay, 9 months (left for England on the 4th November); Detts. Deesa, 9 months; Ahmedabad, 8¾ months; Deolali, 8 months.	6 0
2nd North Staffordshire Regiment	139	226	3	—	9·11	1625·9	21·58	—	65·54	23·92	14·71	Umballa, 2 months (arrived from England on the 4th November); Dett. Dagshai, 1½ months.	0 2
1st York and Lancaster Regiment.	867	1,066	12	24	54·57	1229·5	13·84	27·68	62·94	22·97	18·68	Mhow, 12 months; Dett. Indore, 12 months	1 2
1st Durham Light Infantry ...	863	992	3	23	53·69	1149·5	3·48	26·65	62·21	22·71	19·75	Wellington, 12 months; Dett. Cannanore, 12 months; Calicut, 12 months; Malapuram, 11 months.	1 1½
1st Seaforth Highlanders	745	1,071	25	6	49·90	1437·6	33·56	8·05	66·98	24·45	17·01	Nasirabad, 10½ months (arrived from Egypt on the 20th February); Dett. Neemuch, 10½ months.	0 10
2nd Gordon Highlanders	931	746	10	20	38·03	801·3	10·74	21·48	40·85	14·91	18·61	Delhi Coronation Durbar and manœuvres, ¾ month; Sialkot, 5½ months; Camp Thobba, 5½ months; marching, ½ month; Dett. Amritsar, 1½ months.	2 11
1st Royal Irish Rifles	935	882	19	25	66·48	943·3	20·32	26·74	71·10	25·95	27·51	Delhi Coronation Durbar and manœuvres, ½ month; Fyzabad, 11½ months; marching, ½ month.	4 8
2nd Royal Irish Fusiliers	528	666	3	7	34·96	1261·4	5·68	13·26	66·21	24·17	19·16	Rawal Pindi, 4½ months; Camp Gharial, 6 months (arrived from South Africa on the 19th February).	0 10
2nd Connaught Rangers	885	956	8	19	51·89	1080·2	9·04	21·47	58·63	21·40	19·81	Ahmednagar, 12 months; Dett. Satara, 5 months ...	6 10
2nd Argyll and Sutherland Highlanders	1,039	1,233	18	64	76·51	1186·7	17·32	61·60	73·64	26·88	22·65	Delhi Coronation Durbar and manœuvres, ¾ month; Calcutta, 8⅝ months; Poona, 2⅛ months; marching, ¼ month; Dett. Darjeeling, 7 months.	12 0
1st Royal Munster Fusiliers ...	843	1,023	2	19	53·04	1158·6	2·27	21·52	60·07	21·92	18·02	Multan, 6½ months; Khanspur, 5½ months; marching, ¼ month; Dett. Dalhousie, 7 months.	1 3
3rd Rifle Brigade	1,087	879	15	40	57·73	808·6	13·80	36·80	53·11	19·38	23·97	Delhi Coronation Durbar and manœuvres, ½ month; Meerut, 11½ months; Dett. Delhi, 10½ months; Chakrata, 7⅛ months.	14 10
Total	47,357	48,479	559	1,380	2926·30	1023·7	11·80	29·14	61·79	22·55	22·03		
Garrison Staff and Departments	3,616	2,990	34	77	224·76	826·9	9·40	21·29	62·16	22·69	27·44		
Men of various Corps marching	36	5	—	—	·03	138·9	—	—	·83	·30	2·19		
Grand Total...	69,613	72,081	896	2,063	4397·17	1035·5	12·87	29·64	63·17	23·06	22·27		

Corps.	Annual Average Strength.	Admitted into Hospital.	Deaths in the Command.	Invalided.	Average Daily Sick.	Ratio per 1,000 of Strength.				Sick to each Soldier.	Duration of each Case of Sickness.	Stations occupied during the year.	Years of Service in India.
						Admissions into Hospital.	Deaths.	Invalids.	Average Daily Sick.	Average Time to	Average		
INFANTRY—*cont.*										days.	days.		Yrs. ms.
1st South Lancashire Regiment ...	587	661	13	5	38·10	1126·1	22·15	8·52	64·91	23·69	21·04	Jubbulpore, 10½ months (arrived from South Africa on the 14th February); Dett. Saugor, 10½ months.	0 11
2nd South Lancashire Regiment	100	82	2	19	5·08	820·0	20·00	190·00	50·80	18·54	22·61	Jubbulpore, 1½ months (left for England on the 10th February); Dett. Saugor, ½ month.	7 11
2nd Welsh Regiment	832	618	10	21	38·08	742·8	12·02	25·24	45·77	16·71	22·49	Delhi Coronation Durbar and manœuvres, 1 month; Umballa, 2 months; Subathu, 5½ months; Quetta, 3 months; marching, ½ month.	1 3
2nd Royal Highlanders	839	803	12	6	46·15	957·1	14·30	7·15	55·01	20·08	20·98	Umballa, 12 months; Wing Solon, 6½ months; Dett. Dagshai 6½ months.	1 2
1st Oxfordshire Light Infantry ...	164	155	3	—	7·55	945·1	18·29	—	46·04	16·80	17·78	Umballa, 2½ months (arrived from England on the 23rd October); Dett. Subathu, 2 months.	0 2
2nd Oxfordshire Light Infantry...	783	914	4	23	56·11	1167·3	5·11	29·37	71·66	26·16	22·41	Bombay, 1½ months; Poona, 8 months; marching, ½ month (left for England on the 23rd October); Dett. Deolali, 1 month.	17 7
1st Essex Regiment	1,043	1,059	6	21	68·75	1015·3	5·75	20·13	65·92	24·06	23·70	Bangalore, 12 months; Dett. Wellington, 12 months ..	1 4
1st Northamptonshire Regiment...	820	874	6	22	55·51	1065·9	7·32	26·83	67·70	24·71	23·18	Delhi Coronation Durbar and manœuvres, 1 month; Umballa, 2 months; Dagshai, 6½ months; Jullundur, 2 months; marching, ½ month; Dett. Dagshai, 5½ months.	11 2
1st Shropshire Light Infantry ...	92	66	—	11	5·08	717·4	—	119·57	61·74	22·52	31·41	Poona, 1⅔ months (left for England on the 18th February).	8 1½
2nd Shropshire Light Infantry ...	964	833	18	15	47·04	864·1	18·67	15·56	48·80	17·81	20·61	Bareilly, 2 months; Ranikhet, 8½ months; marching, ½ month (arrived from Natal on the 3rd February).	0 11
1st Middlesex Regiment	1,022	1,089	7	26	74·47	1065·6	6·85	25·44	72·87	26·60	24·96	Secunderabad, 12 months; Dett. Wellington, 12 months.	5 9
2nd King's Royal Rifle Corps ...	1,040	810	4	19	43·95	778·8	3·85	18·27	42·26	15·42	19·80	Delhi Coronation Durbar and manœuvres, ⅔ month; Rawal Pindi, 5 months; Kuldana, 6 months; marching, ½ month.	3 4
1st Wiltshire Regiment	1,032	810	9	27	51·92	784·9	8·72	26·16	50·31	18·36	23·40	Rawal Pindi, 12 months; Wing Upper Topa, 6 months	8 3

1·77
5·3
3·55
7·09
1·77
19·50

CHARTS.

CHART showing the Sickness and Mortality from Enteric Fever in the various Commands occupied by British troops during 1903.

Ratio per 1,000 of strength.

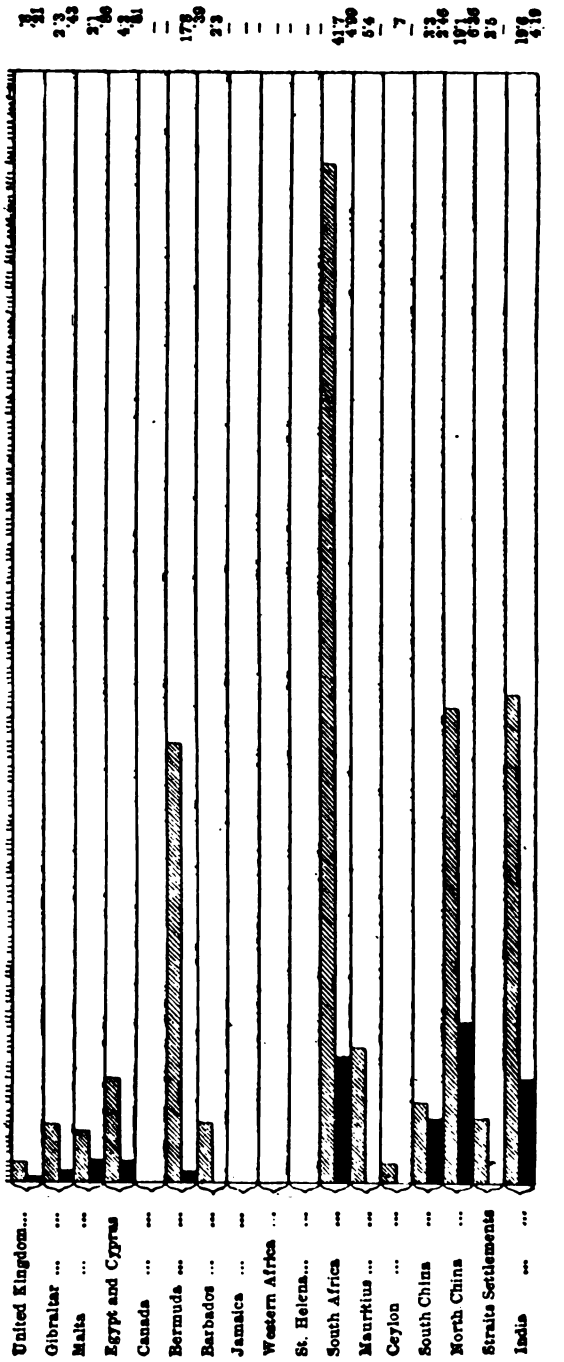
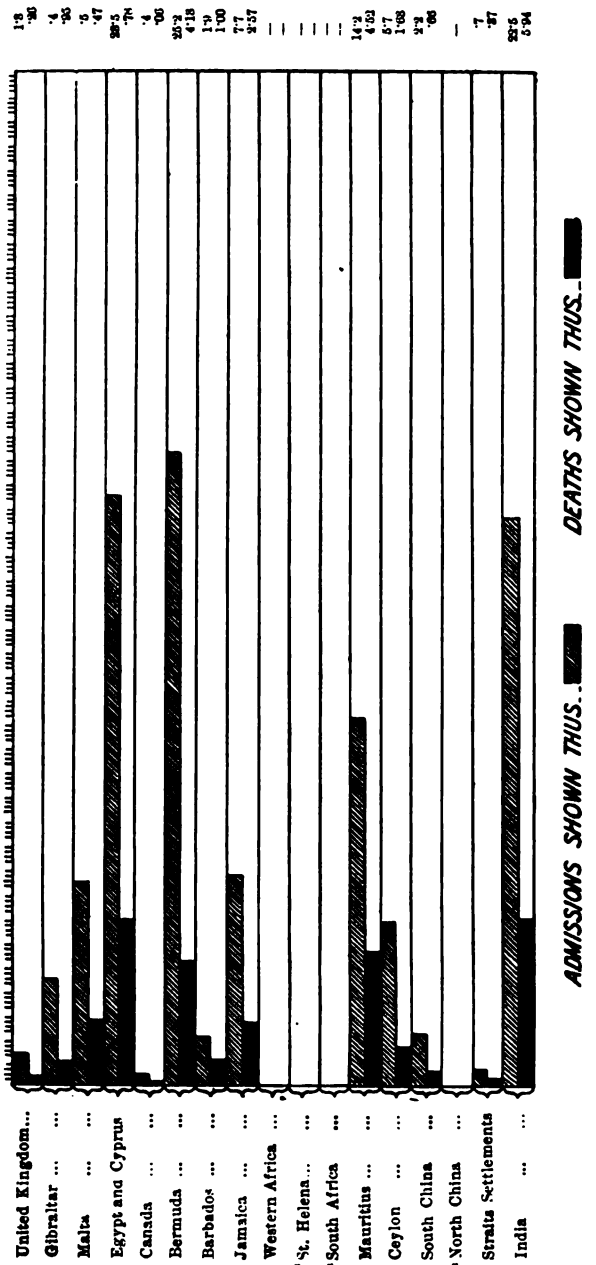


CHART showing the Sickness and Mortality from Enteric Fever in the various Commands occupied by British troops during the 10 years, 1893–1902.

Ratio per 1,000 of strength.



* NOTE.—Statistics for St. Helena, South Africa, and North China will be given in future years.

CHART showing the Sickness, Mortality and Invaliding from Tubercular Diseases in the various Commands occupied by British troops during 1903.

Ratio per 1,000 of strength.

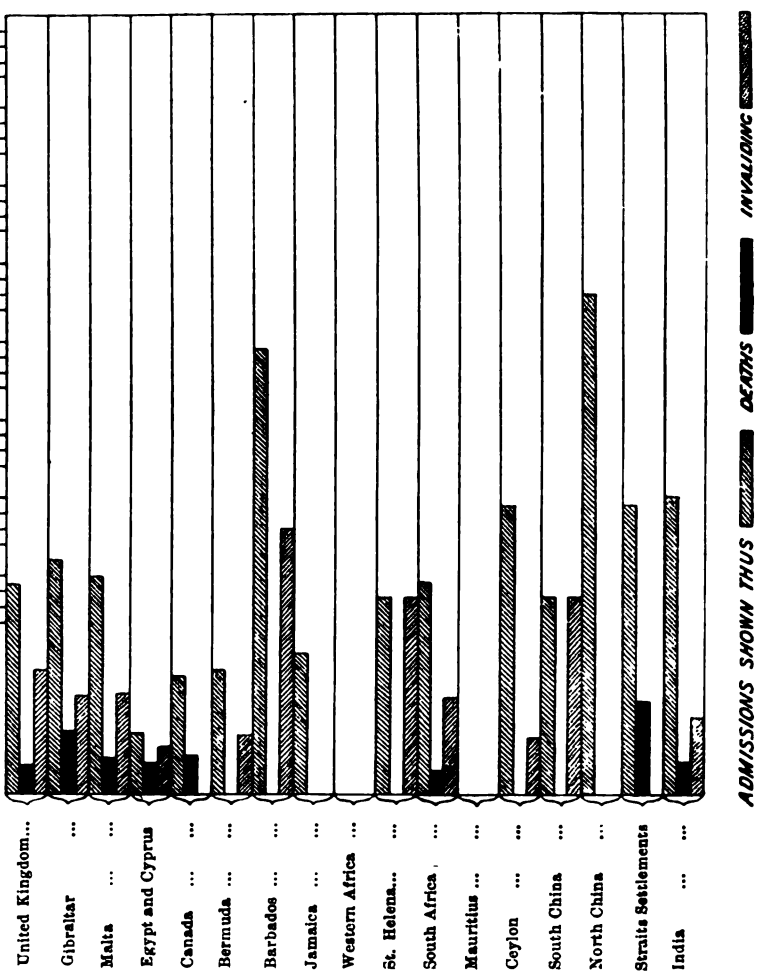
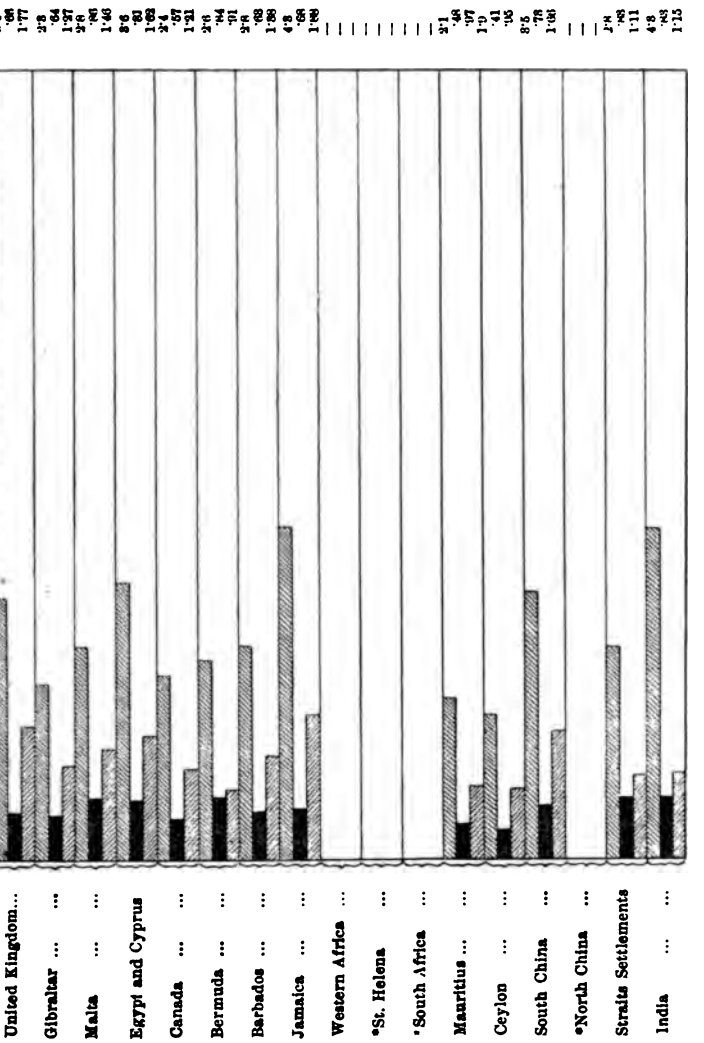


CHART showing the Sickness, Mortality and Invaliding from Tubercular Diseases in the various Commands occupied by British troops during the 10 years, 1893-1902.

Ratio per 1,000 of strength.



* NOTE.—Statistics for St. Helena, South Africa, and North China, will be given in future years.

CHART showing the incidence of Sickness from Malarial Fevers at the undermentioned stations during 1903.

Ratio per 1,000 of strength.

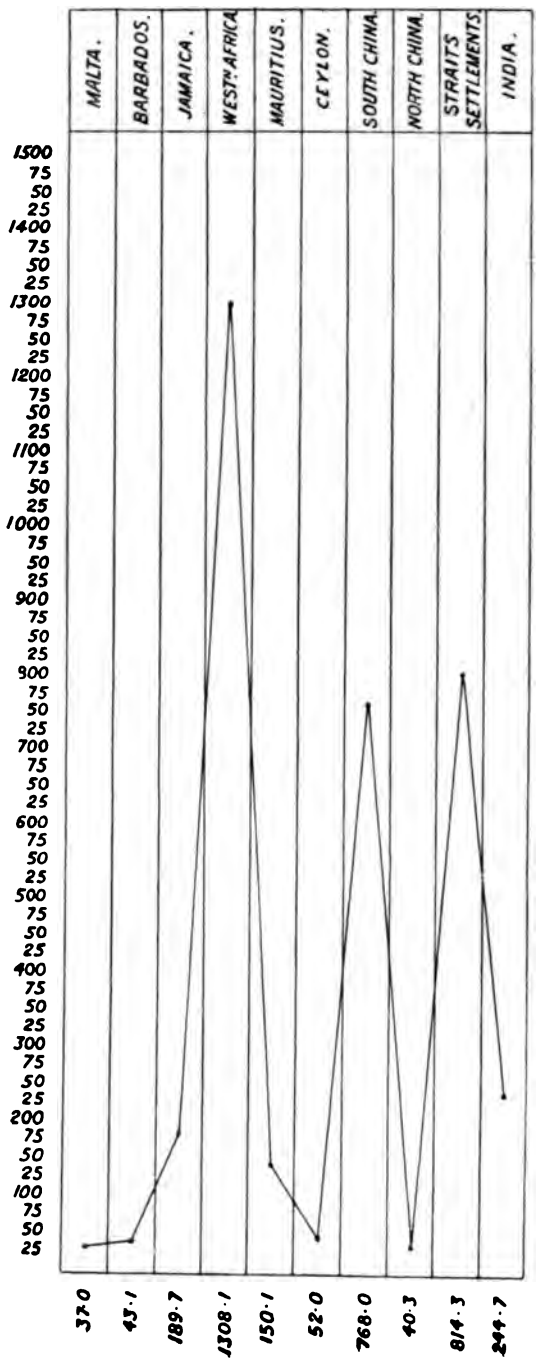
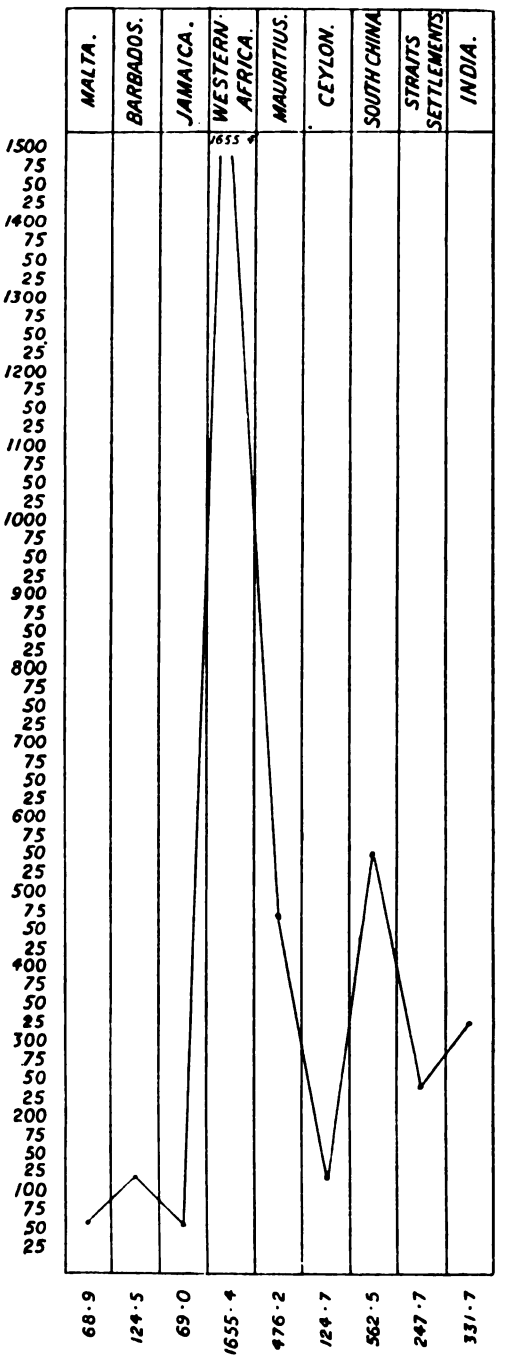


CHART showing the incidence of Sickness from Malarial Fevers at the undermentioned stations during the 10 years, 1893–1902.

Ratio per 1,000 of strength.



NOTE.—Statistics for North China will be given in future years.

Chart showing the incidence of Venereal Disease in the various Commands occupied by British troops during 1903.

Ratio per 1,000 of strength.

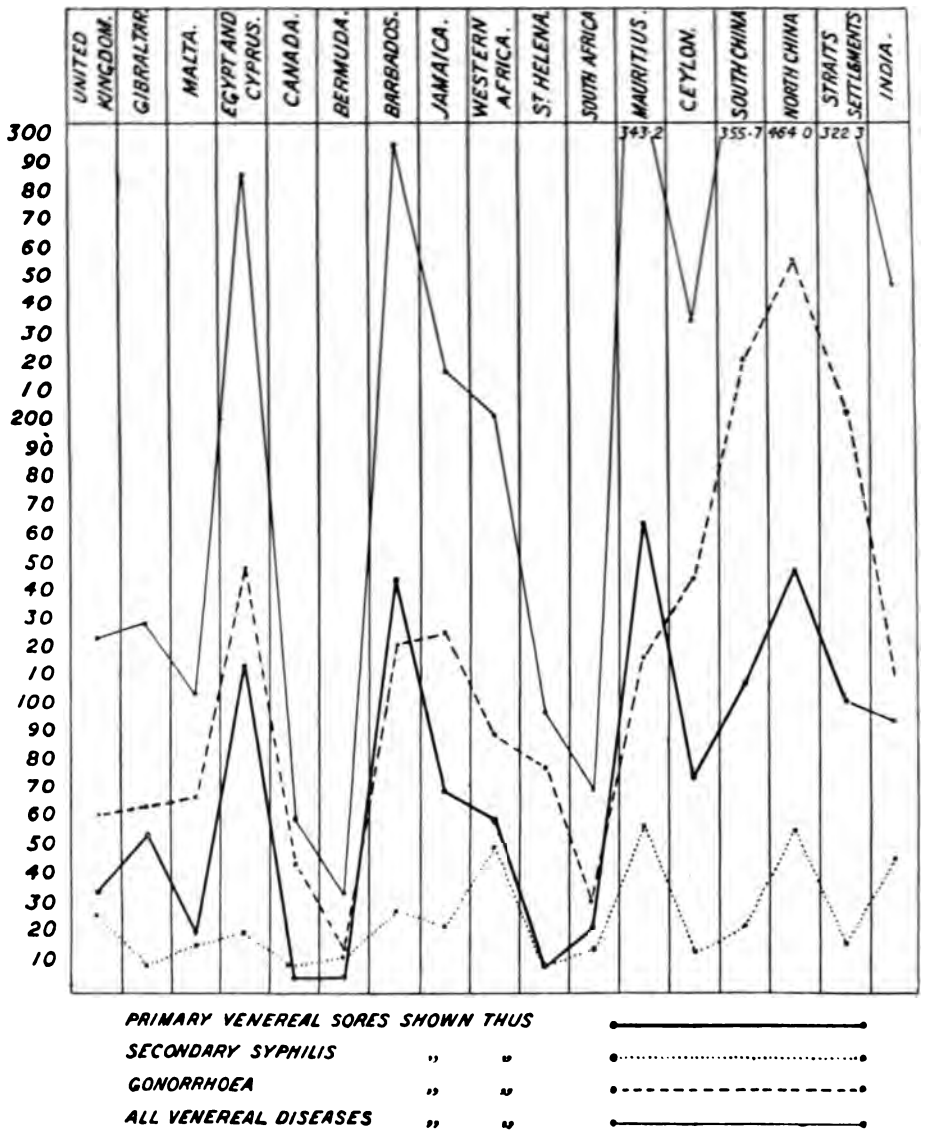
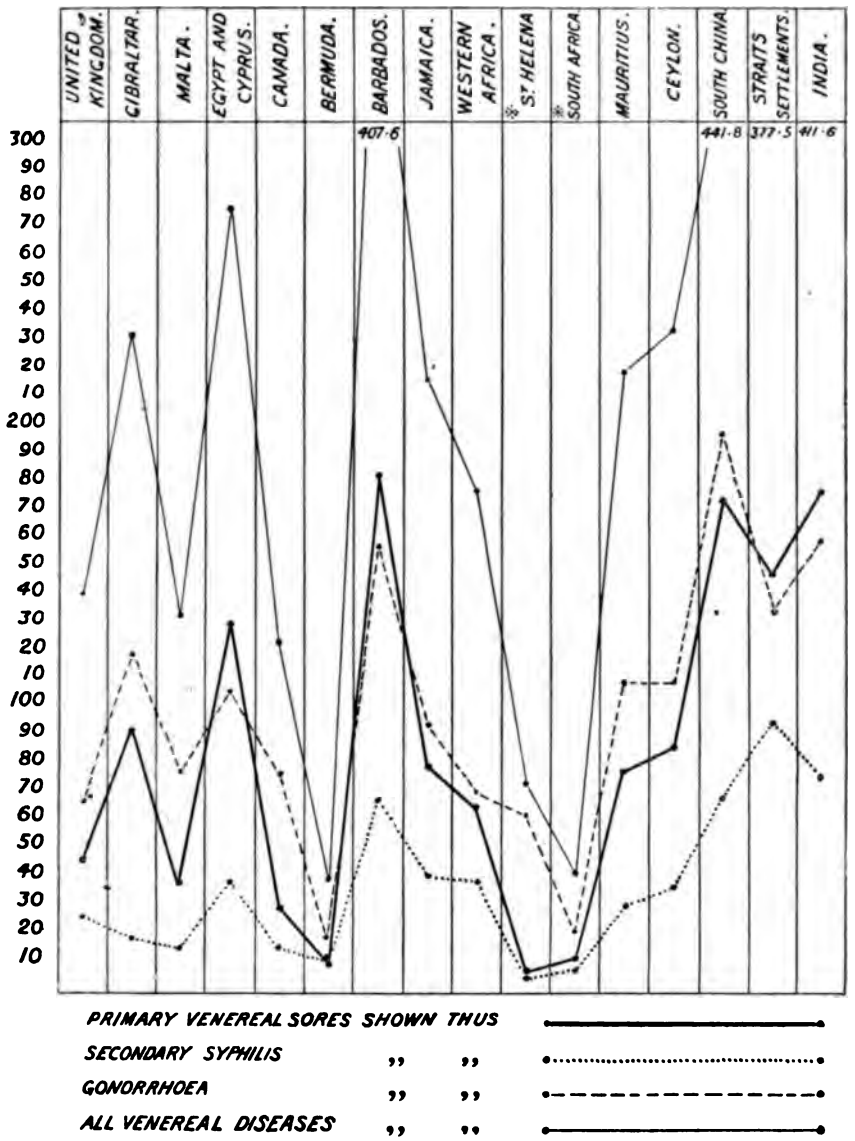


CHART showing the incidence of Venereal Disease in the various Commands occupied by British troops during the 10 years, 1893–1902.

Ratio per 1,000 of strength.



* NOTE.—The figures for St. Helena and South Africa only refer to the year 1902. Statistics for North China will be given in future years.

Annual Abstract of Meteorological Observations taken

Up Park Camp, Jamaica. Lat. 17° 59′ N.

Month.	Mean pressure — Corrected and reduced to 32° Fahrenheit.	Air Temperature.								Tension of Vapour.	Relative Humidity.		
		Mean at 9 a.m.	Mean daily.	Means of		Abs. Max.		Abs. Min.			Per cent.	Min.	
				Max.	Min.	Temp.	Day.	Temp.	Day.		Mean.	Per cent.	Day.
January ...	29·886	75·2	72·8	77·9	67·7	95·6	26	65·2	5	·761	66	44	14
February ...	29·800	88·6	80·8	92·9	68·8	96·6	14	62·2	6	·723	59	36	25
March ...	29·810	78·9	79·8	91·2	68·4	94·4	1	62·4	13	·735	62	43	12
April ...	29·752	80·2	81·2	92·6	69·9	97·4	29	67·6	21	·737	60	44	30
May... ...	29·775	81·3	81·6	91·4	71·8	94·6	21	67·2	1	·795	66	43	1
June ...	29·757	82·1	84·2	95·3	73·2	95·8	25	70·4	1	·810	63	44	25
July ...	29·789	83·6	84·3	95·1	73·6	97·8	9	71·4	7	·752	55	42	3, 14
August ...	29·759	81·5	83·0	92·7	73·3	100·2	10	86·2	11	·768	63	41	10
September ..	29·756	82·9	83·0	93·4	72·7	96·8	16	88·2	4	·814	64	51	16
October ...	29·726	81·8	82·0	92·8	71·3	96·2	13	69·4	27	·825	66	52	10, 17
November ...	29·733	79·7	80·6	92·0	69·3	96·6	11	62·8	29	·765	66	51	15
December ...	29·762	78·4	79·8	92·2	67·4	96·4	12	64·2	5, 11	·721	63	47	10
Year ...	29·775	81·2	81·1	91·6	70·6	100·2	10th Aug.	62·2	6th Feb.	·725	58	36	25th Feb.

Newcastle, Jamaica. Lat. 18° 0′ 6″ N.

January ...	26·376	69·1	71·3	85·1	57·5	86·4	18, 28, 29	54·4	8, 14	·522	65	47	30
February ...	26·348	68·8	70·7	84·4	57·0	86·4	28	52·0	8	·508	63	48	24
March ...	26·314	67·8	69·9	82·0	57·9	86·6	6	53·6	13	·530	70	51	1
April ...	26·305	61·6	72·7	80·7	64·8	85·0	1	55·0	29, 30	·561	73	38	20
May ...	26·469	71·3	72·8	85·5	60·2	84·6	8	56·4	1	·569	74	47	28
June ...	26·327	71·7	73·6	84·6	62·7	88·6	6, 9, 10	60·4	16	·585	72	55	25
July ...	26·349	72·6	74·7	87·5	61·9	95·8	25	60·2	9	·563	64	47	28
August ..	26·340	70·9	71·3	80·5	62·1	89·6	3	60·2	30	·590	75	51	6
September ...	26·351	72·6	72·1	81·9	62·3	87·2	13	61·0	1	·573	64	45	10, 12
October ...	26·320	72·2	70·8	79·8	61·8	85·8	7	58·2	20	·568	64	49	2
November ..	26·311	68·7	66·9	74·2	59·6	82·2	5	50·4	28	·540	70	55	6
December ...	26·309	66·9	66·9	75·9	57·9	80·4	25	50·0	7	·523	71	50	12
Year ...	26·454	69·5	71·1	81·8	60·5	95·8	25th July.	50·0	7th Dec.	·553	69	38	20th April

Bermuda. Lat. 22° 17′ 40″ N.

January ...	29·957	62·4	64·2	69·0	59·5	74·8	3	54·2	10	·511	82	64	28
February ...	30·055	62·3	64·2	70·2	58·2	74·2	17, 22	51·0	21	·501	79	65	7, 27
March ...	30·056	65·2	66·0	69·7	62·3	74·0	1	57·0	28	·550	82	64	8
April ...	29·818	65·1	65·9	70·8	61·1	74·4	16	57·2	8	·524	77	46	26
May... ...	29·910	67·6	68·7	73·9	63·5	76·2	23	59·6	19	·587	79	55	10
June ...	29·920	72·6	73·0	78·2	67·8	84·0	30	61·4	4, 5	·735	83	66	4
July ...	29·990	77·4	78·6	84·7	72·6	90·0	26	67·4	31	·838	79	60	30
August ...	29·966	79·8	81·2	88·1	74·4	90·8	21	70·2	1	·893	76	60	1
September...	29·969	76·9	78·5	83·3	73·6	90·0	5	68·0	29	·820	79	55	30
October ...	29·866	71·1	72·6	76·9	68·4	81·8	11	61·6	30, 31	·650	76	43	2
November ...	29·894	67·3	68·4	72·9	63·9	77·0	6	57·4	29	·551	75	58	4
December ...	29·914	63·1	64·5	69·1	59·9	76·0	14	49·8	20	·510	81	63	21
Year ...	29·943	69·2	70·5	75·0	65·4	90·8	21st August.	51·0	21st Feb.	·689	79	43	2nd Oct.

at Netley and Stations Abroad in the year 1903.

Long. 76° 56′ W. Height of Barometer Cistern above Sea, 245 feet.

Mean Amount of Cloudiness.	Rainfall.			Weather.								Wind.								
				No. of days of								No. of Observations under each Point per Month.								
	Total.	Max.	Day.	Rain.	Snow.	Hail.	Thunder Storms.	Fog.	Clear Sky.	Overcast.	Gales.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.
5·0	·60	·24	20	6	—	—	—	—	9	—	—	—	27	—	16	—	6	1	12	—
5·0	·02	·02	1	1	—	—	—	—	2	—	—	—	14	—	26	—	6	1	9	—
5·0	1·21	·66	20	4	—	—	—	—	6	—	—	—	6	—	36	1	18	—	1	—
4·0	1·05	·54	8	8	—	—	—	—	6	2	—	—	8	—	25	2	20	—	5	—
6·0	5·13	2·55	30	17	—	—	3	—	—	4	—	—	23	—	24	—	9	1	5	—
5·0	1·00	·23	12	10	—	—	—	—	—	5	—	—	14	—	29	—	7	—	10	—
6·0	·31	·09	9	5	—	—	1	—	—	4	—	—	10	—	29	—	14	—	9	—
6·0	6·45	4·00	10	13	—	—	1	—	—	5	1	—	14	—	31	—	4	—	13	—
6·0	3·04	1·72	3	9	—	—	1	—	1	—	—	—	10	—	38	—	7	—	5	—
6·0	4·68	1·23	19	14	—	—	2	—	—	3	—	—	17	—	26	—	9	—	10	—
5·4	2·09	·75	11	13	—	—	—	—	2	2	—	—	25	—	21	—	7	1	6	—
5·5	·72	·55	13	4	—	—	—	—	1	—	—	1	21	—	22	—	7	1	6	—
5·4	26·30	4·00	10th Aug.	104	—	—	8	—	27	25	1	1	189	—	323	3	114	5	91	—

Long. 76° 0′ 42″ W. Height of Barometer Cistern above Sea, 3,800 feet.

3·0	1·85	·45	6	9	—	—	—	—	—	12	—	17	30	9	—	—	—	1	5	—
3·0	1·36	·65	17	6	—	—	—	—	—	5	—	6	14	16	15	2	—	1	2	—
4·0	2·50	·64	17	14	—	—	—	—	—	12	—	20	21	6	10	1	—	—	4	—
5·0	9·27	4·17	17	15	—	—	—	—	—	17	—	17	11	8	9	8	2	5	—	—
7·0	12·24	3·55	9	17	—	—	2	—	—	31	—	9	11	6	23	9	—	—	4	—
5·0	1·45	·45	29	10	—	—	3	—	—	17	—	—	8	18	23	8	1		2	—
3·0	·59	·20	28	7	—	—	—	—	—	4	—	3	11	36	11	1	—		—	—
5·0	26·72	12·18	10	19	—	—	—	—	—	10	—	1	6	4	36	15	—	—	—	—
4·9	3·91	·75	3	14	—	—	—	—	—	10	—	1	1	3	33	21	—	—	—	—
5·5	7·0	1·80	4	19	—	—	—	—	—	17	—	4	6	5	28	18		—	1	—
6·0	11·57	1·85	14	20	—	—	—	—	—	24	—	9	17	10	14	9		—	1	—
4·5	11·71	4·85	12	16	—	—	2	—	3	11	—	9	17	4	11	2	5	1	5	8
4·6	90·17	12·18	10th Aug.	166	—	—	7	—	3	170	—	96	153	125	213	94	8	8	24	8

Long. 64° 47′ W. Height of Barometer Cistern above Sea, 151 feet.

7·0	4·37	·66	18	21	—	—	—	—	—	5	3	3	6	—	2	2	20	5	19	5
6·0	2·22	·84	22	11	—	—	—	—	—	—	1	2	5	—	3	2	21	3	19	1
6·0	4·25	1·14	26	20	—	—	—	—	—	6	—	3	27	10	8	5	6	—	1	2
5·0	4·19	1·64	27	16	—	—	—	—	—	3	2	8	5	2	2	10	17	8	8	—
7·0	5·28	2·00	17	11	—	—	2	—	—	4	—	7	22	9	5	2	5	—	5	7
7·0	2·53	1·18	23	14	—	—	1	—	—	5	—	2	4	1	12	7	19	8	7	—
5·8	1·73	·80	24	9	—	—	1	—	1	3	—	4	2	3	3	17	20	4	9	—
6·0	3·85	1·56	3	17	—	—	2	—	—	2	—	3	1	—	1	14	27	11	5	—
6·5	8·38	4·19	28	19	—	—	1	—	—	4	1	4	9	14	10	10	8	3	2	—
7·5	9·83	4·33	22	17	—	—	1	—	—	7	2	8	9	8	7	2	11	4	6	8
6·0	7·22	2·20	30	14	—	—	1	—	2	5	—	7	9	1	6	6	11	6	3	11
7·5	9·10	2·44	26	23	—	—	—	—	1	9	2	7	6	—	4	4	16	6	7	12
6·5	62·95	4·33	22nd Oct.	192	—	—	9	—	4	53	11	58	105	48	63	81	181	58	90	46

Annual Abstract of Meteorological Observations taken

SCUTARI CEMETERY. Lat. 41° 0′ 0″ N.

Month.	Mean Pressure—Corrected and reduced to 32° Fahrenheit.	Air Temperature.								Tension of Vapour.	Relative Humidity.		
		Mean at 9 a.m.	Mean daily.	Means of		Abs. Max.		Abs. Min.			Per cent.	Min.	
				Max.	Min.	Temp.	Day.	Temp.	Day.		Mean.	Per cent.	Day.
January ...	30·115	39·1	41·4	46·3	36·6	59·8	14	24·0	18	·215	77	60	24
February ...	30·137	39·8	42·6	48·2	37·0	60·8	24	27·2	21	·208	73	49	24
March ...	29·995	43·7	46·5	53·7	39·4	68·4	31	34·0	13	·244	74	46	2
April ..	29·735	53·3	57·1	66·4	47·9	77·6	26	37·8	22	·339	69	40	1
May ...	29·844	61·5	64·6	73·8	55·5	89·4	14	46·6	24	·463	71	48	11
June ..	29·729	66·6	70·0	78·6	61·4	85·4	20 & 21	54·8	2	·541	70	46	20
July ...	29·778	70·8	75·1	85·4	64·9	93·0	21	57·6	4	·577	61	37	24 & 30
August ...	29·810	69·9	73·2	82·1	64·4	91·0	17	56·6	22	·556	63	35	7
September	29·945	64·7	68·2	76·5	60·0	87·4	13	50·0	28	·464	63	29	13
October ...	29·897	59·0	61·3	68·0	54·6	77·0	10	43·4	22	·417	72	46	4
November	29·977	50·5	53·2	58·6	47·7	68·4	1	37·4	25	·301	72	53	24
December	29·956	46·4	49·0	53·5	44·6	65·4	2	34·0	29	·275	78	56	1
Year ...	29·902	55·4	58·5	65·9	51·1	93·0	21st July	24·0	18th Jan.	·383	70	29	13th Sept.

POLYMEDIA, CYPRUS. Lat. 34° 42½′ N.

January ...	29·414	50·1	53·2	66·9	39·6	73·0	13	33·4	17	·289	67	52	1
February ...	29·483	52·9	57·0	67·5	46·5	74·5	4	41·2	22	·323	69	46	27
March ...	29·384	58·5	60·5	72·1	48·9	79·1	29 & 31	45·1	25	·365	62	48	18, 24
April	29·338	67·0	65·1	78·0	52·2	94·0	27	47·3	4	·453	57	31	1
*May ...	29·381	74·0	74·6	90·3	58·9	109·8	15	53·5	5	·585	50	37	15
June ...													
July ...													
August ...													
September													
†October ...	29·495	70·4	70·1	83·1	57·1	93·4	9 & 10	74·1	22	1·000	50	33	10
November	29·507	62·4	62·5	74·5	50·5	86·9	4	41·3	24	·449	68	42	1
December	29·500	58·1	69·4	70·7	48·1	83·9	15	45·3	5, 7, 8	·440	81	53	1

* To 22nd inclusive. Instruments removed to Mount Troodôs.
† From 9th inclusive. Instruments removed from Mount Troodôs.

MOUNT TROODÔS, CYPRUS. Lat. 34° 54′ N.

January ...													
February ...													
March ...													
April ...													
May ...	Aneroid												
*June ...	24·12	58·1	64·9	81·6	48·3	91·1	27	41·3	24	·260	50	37	12
July ...	24·07	64·3	70·9	87·2	54·7	94·6	23	46·5	5	·386	50	33	27
August ...	24·04	63·9	69·3	83·3	55·3	93·2	3	69·3	25	·452	53	33	9
†September	24·09	57·2	62·3	76·5	48·2	89·9	14	34·8	26	·335	58	38	3, 16
October ...													
November													
December													

* From 5th inclusive. Instruments removed from Polymedia.
† To 29th inclusive. Instruments removed to Polymedia.

at Netley and Stations Abroad in the year 1903.

Long. 29° 3′ 0″ E. Height of Barometer Cistern above Sea, 60 feet.

Mean amount of Cloudiness.	Rainfall. Total.	Max.	Day.	Weather. No. of days of Rain.	Snow.	Hail.	Thunder Storms.	Fog.	Clear sky.	Overcast.	Gales.	Wind. No. of Observations under each Point per Month. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.
6·0	3·06	·80	17	14	8	7	—	5	6	17	—	10	12	2	1	4	18	1	3	11
6·0	·75	·30	11	8	2	7	—	3	6	9	—	12	7	—	—	4	10	1	3	19
5·0	1·74	·47	14	13	—	—	1	1	10	12	—	26	1	—	2	5	2	3	3	9
5·0	1·72	·44	6	10	—	—	—	—	7	6	—	13	—	—	—	6	4	—	—	37
6·0	·59	·30	26	6	—	1	1	1	5	9	—	23	—	—	—	16	3	1	—	19
5·0	2·26	·56	23	10	—	1	5	2	3	4	—	19	—	—	—	19	11	3	1	3
2·0	·03	·02	1	2	—	—	—	1	16	—	—	23	9	2	—	12	1	3	2	4
4·0	4·17	1·21	28	10	—	—	5	1	13	6	—	22	21	3	—	3	7	—	4	2
4·0	3·10	2·14	21	8	—	—	—	...	12	5	—	6	32	2	1	2	4	1	—	12
5·0	5·89	1·47	11	11	—	3	3	2	9	9	—	12	1	1	1	8	16	2	1	20
6·2	4·55	·94	22	12	—	—	—	1	2	9	—	26	4	1	2	8	8	—	—	11
7·6	2·51	·87	28	14	—	—	—	—	1	17	—	19	14	1	—	7	5	—	—	16
5·1	30·37	2·14	21st Sept.	118	10	19	15	17	90	93	—	221	102	12	7	94	95	17	17	165

Long. 30° 1′ E. Height of Barometer Cistern above Sea, 460 feet.

2·0	·63	·20	23	6	—	—	—	—	14	—	—	2	4	—	3			—	1	53
2·0	2·10	·53	16	10	—	—	—	—	12	1	—	2	—	4	—		2	—	12	36
1·0	1·52	·69	19	5	—	—	—	—	19	—	—	2	2	—	—			—	2	56
2·0	·22	·12	8	3	—	—	2	—	13	—	—	—	—	1	1		2	2	4	19
1·0	—	—	—	—	—	—	—	—	19	—	—	—	—	—	—			—	2	19
1·0	1·21	·65	11	5	—	1	2	—	13	1	2	2	6	—	3	—	10	—	19	6
1·0	2·98	1·40	9	6	—	1	1	—	11	1	—	1	18	—	12	—	7	—	25	2
1·7	3·38	1·38	23	10	—	1	2	—	12	9	3	7	13	1	8	1	3	1	15	13

Long. 32° 53′ E. Height of Barometer Cistern above Sea, 5,700 feet.

2·0	1·19	·27	6	7	—	2	5	—	18	3	—	3	4	—	1	—	—	—	3	15
1·0	·46	·41	20	3	—	—	—	—	22	—	1	7	4	—	2	1	9	6	19	14
1·0	·67	·35	24	3	—	—	—	—	22	9	4	12	10	—	4	—	19	—	6	2
1·0	·30	·30	25	1	—	—	1	—	19	1	—	8	26	—	—	—	13	3	7	1

Annual Abstract of Meteorological Observations taken

KHARTOUM, EGYPT. Lat. 15° 38′ 20″ N.

Month.	Mean Pressure—Corrected and reduced to 32° Fahrenheit.	Air Temperature.								Tension of Vapour.	Relative Humidity.		
		Mean at 9 a.m.	Mean daily.	Means of		Abs. Max.		Abs. Min.			Per cent.	Min.	
				Max.	Min.	Temp.	Day.	Temp.	Day.		Mean.	Per cent.	Day.
January ...	29·949	54·5	66·2	80·3	52·2	91·4	16	42·8	23	—	—	—	—
February...	29·982	56·8	68·6	82·7	54·6	100·4	20	48·2	1	—	—	—	—
March ...	29·932	61·1	79·9	90·7	59·2	104·0	19	55·4	3, 29	—	—	—	—
April ...	28·515	78·2	87·0	103·9	70·2	113·0	29	61·7	16	—	—	—	—
May ...	28·548	78·9	91·0	105·5	76·5	109·4	5, 6, 24	65·3	11	—	—	—	—
June ...	28·534	79·6	92·5	106·6	78·5	112·1	7	68·9	10	—	—	—	—
July ...	28·567	77·7	89·4	101·6	77·2	105·8	2	70·7	29	—	—	—	—
August ...	29·557	78·6	*	*	75·8	*	*	64·4	24, 31	—	—	—	—
September	28·569	77·5	*	*	69·6	*	*	60·8	28	—	—	—	—
October ...	28·579	75·6	*	*	73·1	*	*	67·1	26	—	—	—	—
November	28·613	71·6	84·2	99·1	69·4	105·8	4, 6	64·4	21	—	—	—	—
December	29·738	66·9	80·1	94·8	65·4	101·3	23	56·3	17	—	—	—	—
Year ...	29·090	71·4	—	—	68·4	—	—	42·8	23rd Jany.	—	—	—	—

* Maximum thermometer out of order.

FORT NAPIER, NATAL. Lat. 29° 3′ S.

January ...	27·171	72·7	77·5	91·6	63·9	115·0	11	55·0	15	·585	60	29	25, 28
February...	27·232	71·6	76·0	89·8	62·3	107·2	25	55·9	12	·543	58	31	2
March ...	27·250	68·7	74·6	88·5	60·2	154·6	10	37·2	15	·523	54	30	11, 20
April ...	27·237	64·7	66·8	77·6	56·0	135·2	6	37·4	29	·422	59	33	5
May ...	27·234	60·6	65·1	79·2	51·1	91·2	9	39·6	30	·343	49	25	14
June ...	27·344	52·8	59·5	74·9	44·2	88·6	3	33·4	12	·252	43	24	25
July ...	27·401	53·2	58·8	72·9	44·7	91·4	24	37·2	19, 21	·275	51	24	9, 21
August ...	27·350	58·1	63·6	78·2	49·1	96·4	16	38·8	19	·212	48	26	4, 5, 7, 15, 23
September	27·381	61·7	66·4	80·5	52·4	104·8	28	37·2	1	·350	49	27	2, 23, 28, 29
October ...	27·191	66·7	69·6	83·7	55·6	105·0	24	43·4	20	·399	51	27	24, 27
November	27·194	66·3	69·6	81·1	58·2	103·2	30	49·4	4	·462	62	27	13, 18
December	*	69·4	73·3	85·0	61·6	104·6	25	52·2	15	·520	60	27	15, 25
Year ...	*	63·9	68·4	81·1	54·1	154·6	10th March.	33·4	12th June.	·415	54	24	25th June. 9, 21 July.

* Barometer broken.

PRETORIA, S.A. Lat. 25° 52′ 8″ S.

January ...	—	—	—	—	—	—	—	—	—	—	—	—	—
February ...	—	—	—	—	—	—	—	—	—	—	—	—	—
March ...	25·010	63·0	68·4	80·8	56·1	89·2	4	47·2	21	·406	52	25	24
April ...	25·021	58·7	62·3	74·2	50·5	82·1	8	43·5	5	·387	60	31	8
May ...	25·089	53·5	56·9	70·8	43·0	78·6	7	31·5	15	·311	55	32	21
June ...	25·158	45·8	50·6	66·5	34·7	72·5	15	30·1	13	·203	47	24	30
July ...	25·169	47·5	52·7	66·5	39·0	74·1	3	32·6	5	·223	46	25	22
August ...	25·116	52·2	57·9	72·5	43·3	79·5	8	36·5	29	·239	45	24	22
September	25·146	54·9	60·9	75·5	46·3	88·4	28	35·2	2	·269	43	23	12
October ...	24·974	62·3	67·3	81·4	53·2	90·8	10	31·2	22	·366	45	24	6, 10, 26
November	25·693	63·6	68·5	79·7	57·3	90·6	1	49·4	4	·409	56	21	7
December	25·660	65·5	69·8	81·6	58·1	89·5	23	45·6	3	·464	58	26	30
Year ...	—	—	—	—	—	—	—	—	—	—	—	—	—

at Netley and Stations Abroad in the Year 1903.

Long. 32° 29′ 30″ E. Height of Barometer Cistern above Sea, 1,233 feet.

Mean Amount of Cloudiness.	Rainfall. Total.	Rainfall. Max.	Rainfall. Day.	Weather. No. of days of Rain.	Snow.	Hail.	Thunder Storms.	Fog.	Clear Sky.	Overcast.	Gales.	Wind. No. of Observations under each Point per Month. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.
·5	—	—	—	—	—	—	—	—	17	—	—	50	10	1	—	—	—	—	1	—
—	—	—	—	—	—	—	—	—	—	—	—	34	16	1	—	—	—	—	5	—
—	—	—	—	—	—	—	—	—	31	—	—	33	26	1	1	—	—	—	1	—
—	—	—	—	—	—	—	—	—	20	—	—	19	26	11	1	—	1	—	1	1
	in.	in.																		
—	·94	·76	11	2	—	—	—	—	—	—	—	3	7	12	8	20	7	3	2	—
—	—	—	—	—	—	—	—	—	—	—	—	1	6	7	2	20	15	5	4	—
—	·69	·65	29	2	—	—	—	—	7	—	—	4	5	4	4	25	3	2	—	—
	mm.	mm.																		
—	12·2	11·0	21	2	—	—	—	—	—	—	—	1	1	1	2	41	11	5	—	—
1·8	14·0	10·5	5	3	—	—	—	—	2	—	—	11	3	—	1	28	13	3	1	—
1·0	—	—	—	—	—	—	—	—	26	—	—	24	22	—	—	8	5	1	2	—
·6	—	—	—	—	—	—	—	—	25	—	—	38	21	1	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	31	—	—	28	33	—	—	—	—	—	1	—
·2	—	—	—	9	—	—	—	—	159	—	—	246	176	38	19	142	55	19	18	1

Long. 30° 2′ E. Height of Barometer Cistern above Sea, 2,220 feet.

6·0	1·71	·45	24	15	—	1	7	—	2	8	1	—	2	7	2	1	—	1	1	48
4·0	1·33	·36	15	13	—	—	5	—	10	6	1	—	3	—	10	—	3	—	—	4
3·0	1·82	·37	19	9	—	—	4	—	14	4	—	—	2	—	6	—	8	—	1	45
4·0	4·38	1·49	27	11	—	—	1	—	4	7	—	—	—	—	4	—	5	—	—	51
3·0	·19	·12	14	3	—	—	2	—	14	4	—	2	—	—	3	—	2	2	—	53
2·0	·28	·15	3	2	—	—	—	—	21	3	—	1	—	—	2	—	—	—	—	57
3·0	1·04	·80	17	4	—	—	—	—	16	7	—	1	3	—	—	—	—	—	—	58
2·2	·99	·84	26	2	—	—	—	—	17	3	—	—	1	—	—	—	—	—	3	58
3·0	·74	·42	3	4	—	—	1	—	11	5	—	—	—	—	—	—	1	2	4	53
5·0	1·09	·65	28	6	—	—	—	—	9	12	2	—	—	3	1	—	4	4	2	48
6·9	6·60	1·41	27	15	—	2	5	—	3	14	1	—	—	—	—	1	3	—	—	58
6·0	6·24	1·31	22	14	—	2	6	—	6	11	1	—	—	—	—	1	3	—	—	58
4·0	26·41	1·49	27th April.	98	—	5	31	—	127	84	6	4	11	10	28	2	26	10	12	591

Long. 28° 10′ E. Height of Barometer Cistern above Sea, 4,505 feet.

—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2·5	1·77	·47	15	7	—	—	5	—	10	5	—	2	9	8	9	7	9	7	3	8
4·0	6·37	1·84	30	13	—	1	5	—	10	6	—	3	12	6	6	5	10	4	2	12
2·2	·29	·09	7	5	—	—	2	—	16	1	2	5	6	5	4	5	8	3	9	17
5·5	—	—	—	—	—	—	—	—	22	—	—	1	2	4	3	—	5	12	14	19
1·1	—	—	—	—	—	—	—	—	18	—	—	7	6	5	3	3	2	6	8	22
1·5	·04	·04	27	1	—	1	1	—	15	1	1	13	8	1	2	1	5	2	8	22
2·2	·27	·25	16	2	—	1	2	—	12	—	1	15	12	6	3	—	—	2	6	19
3·6	1·46	·72	16	6	—	1	4	—	5	1	—	11	13	8	2	1	2	8	8	9
5·5	5·88	1·69	22	17	—	1	15	—	1	1	2	11	8	6	6	5	6	7	5	6
6·0	5·09	1·14	1	11	—	2	11	—	1	—	2	18	16	10	1	3	4	1	3	6
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual Abstract of Meteorological Observations taken

Sierra Leone. Lat. 8° 29′ 30″ N.

Month.	Mean Pressure—Corrected and reduced to 32° Fahrenheit.	Air Temperature.								Tension of Vapour.	Relative Humidity.		
		Mean at 9 a.m.	Mean daily.	Means of		Abs. Max.		Abs. Min.			Per cent.	Min.	
				Max.	Min.	Temp.	Day.	Temp.	Day.		Mean.	Per cent.	Day.
ary ...	29·676	79·4	81·7	89·5	73·9	95·0	17	71·0	2	·780	67	39	1
—y ...	29·715	80·3	82·8	90·3	75·3	95·0	22	73·5	8	·774	64	38	23
...	29·680	80·8	83·5	91·3	75·8	98·0	17	71·0	27	·778	63	45	17
...	29·676	81·3	83·0	90·6	75·5	95·0	8	69·0	21	·803	65	37	7
...	29·717	81·0	82·6	90·4	74·9	94·0	10	70·0	21, 23	·822	69	55	16
...	29·768	79·4	79·9	87·2	72·6	92·0	14	68·0	27	·832	75	59	27
...	29·774	77·8	78·2	84·1	72·3	88·4	9	68·0	10, 27	·837	82	64	12
t ...	29·768	76·3	77·0	82·7	71·3	87·0	28	62·9	9	·832	86	62	28
ber ...	29·755	78·0	79·0	86·2	71·9	90·4	23	67·0	25	·842	80	65	6
r ...	29·738	79·4	80·2	88·5	72·0	91·8	17	68·4	4	·829	75	60	21
mber ...	29·708	79·6	81·3	89·7	72·9	93·0	27	66·0	18	·816	70	57	17
December ...	29·677	78·6	81·5	89·6	73·5	93·9	23	70·4	31	·750	66	37	23
Year ...	29·721	79·3	80·9	88·3	73·5	98·0	17th March	62·9	9th Aug.	·808	72	37	7th April 23rd Dec.

Barbados. Lat. 13° 7′ 39″ N.

January ...	30·046	77·1	79·1	85·2	73·0	88·0	22	70·2	26	·739	69	52	26
February ...	30·144	68·9	79·3	85·5	73·2	88·0	6	70·0	2	·733	69	48	14
*March ...	30·039	77·5	79·2	86·1	72·4	88·0	16	66·8	15	·719	66	50	14
April ...	30·006	78·5	80·5	86·8	74·3	88·6	25	72·0	2, 3, 4	·761	69	54	24
May ...	30·020	80·7	82·4	88·8	76·0	90·0	14	71·0	6	·735	65	46	28
June ...	30·035	80·1	82·2	88·7	75·8	90·8	16	73·2	29	·774	65	53	20
July ...	30·041	79·5	80·8	86·7	74·9	88·0	19	71·8	23	·795	70	55	5
August ...	29·998	80·2	81·8	87·4	74·8	89·2	22	71·0	17	·827	72	60	5
September ...	30·016	81·1	81·5	88·2	74·9	91·0	26	73·0	1	·835	70	56	10
October ...	29·986	80·2	81·7	88·2	75·2	91·2	9	72·0	19	·833	74	60	14
November ...	29·991	79·4	81·0	88·6	73·5	91·2	6	71·0	30	·770	57	47	1
December ...	29·959	78·8	79·6	86·5	72·7	90·0	1	68·0	4	·704	62	50	5, 24
Year ...	30·023	78·5	80·7	87·2	74·2	91·2	9th Oct. 6th Nov.	73·2	29th June	·768	67	46	28th May.

* 22nd March. Dust storm, due to volcanic eruption at St. Vincent.

St. Lucia. Lat. 14° 0′ 13″ N.

January ...	29·208	73·0	†	†	66·0	†	†	64·0	24	·734	76	63	15, 24
February ...	29·357	73·0	†	†	66·0	†	†	64·0	25	·727	79	67	16
March ...	29·618	74·7	†	†	61·9	†	†	61·0	19, 30	·723	74	55	9, 13
April ...	29·275	76·0	75·0	84·0	66·0	87·0	20, 21	62·0	1	·745	70	52	15
May ...	29·308	77·0	77·5	86·0	69·0	93·0	9	65·0	1, 3, 5, 8, 15	·785	73	60	23
June ...	29·318	77·0	79·0	86·0	72·0	97·0	15	70·0	3	·792	71	61	4
July ...	29·223	76·5	78·0	84·0	72·0	96·0	15, 19	65·0	3	·771	77	56	10
August ...	29·132	77·0	79·0	86·0	72·0	96·0	7, 9, 17, 20	69·0	8, 25, 31	·780	76	51	5
September	29·400	77·5	82·0	91·0	73·0	96·0	12 days	70·0	1	·741	70	55	23, 24
October ...	29·251	76·0	*	*	*	*	*	*	*	·746	74	52	7
November	29·228	77·5	77·0	84·0	70·0	95·0	14	67·0	15	·779	73	56	22
December ...	29·254	74·7	75·2	81·1	69·3	84·0	60·0	60·0	19	·720	76	53	2
Year ...	29·305	75·8								·754	74	51	5th Aug.

* Maximum and Minimum Thermometers incorrectly levelled. † Maximum Thermometer broken.

Netley and Stations Abroad in the Year 1903.

ıg. 13° 9′ 17″ W. Height of Barometer Cistern above Sea, 22 feet.

Rainfall.			Weather.								Wind.								
			No. of days of								No. of Observations under each Point per Month.								
Total.	Max.	Day.	Rain.	Snow.	Hail.	Thunder Storms.	Fog.	Clear Sky.	Overcast.	Gales.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.
·54	·54	28	1	—	—	2	—	—	—	—	4	3	16	—	—	4	15	6	14
—	—	—	—	—	—	—	3	—	—	—	4	1	10	3	—	1	14	10	13
1·12	1·07	26	2	—	—	5	—	4	—	—	2	2	11	1	1	2	37	5	1
1·82	2·02	20	7	—	—	14	—	2	—	—	2	3	9	3	—	3	27	10	3
2·92	4·03	28	16	—	—	21	—	1	—	—	3	—	11	3	1	6	22	9	7
3·09	3·18	5	20	—	—	18	—	—	—	—	2	2	17	1	1	3	18	6	10
3·90	5·17	14	29	—	—	9	—	—	—	—	2	3	2	—	2	11	30	4	8
3·75	9·55	12	28	—	—	5	—	—	—	—	1	3	5	3	2	6	23	5	14
3·87	3·50	2	26	—	—	12	—	—	—	—	2	1	4	—	3	5	23	4	18
1·37	2·21	3	20	—	—	27	—	—	—	—	3	1	18	1	1	3	14	8	13
3·77	1·02	10	9	—	—	19	—	—	—	—	6	—	17	1	—	4	13	5	14
·16	·14	2	2	—	—	2	—	—	—	—	7	2	23	5	1	1	7	5	11
13·31	9·55	12th Aug.	160	—	—	134	3	7	—	—	38	21	143	21	12	49	243	77	126

Long. 59° 40′ 8″ W. Height of Barometer Cistern above Sea, 30 feet 8 inches.

2·08	·46	18	17	—	—	—	—	—	—	—	—	36	—	—	—	—	—	26
1·86	·31	27	13	—	—	—	—	—	—	—	—	36	2	—	—	—	—	18
3·19	1·57	23	11	—	—	—	—	1	3	7	—	50	2	3	—	—	1	6
1·93	·50	26	10	—	—	—	—	—	7	—	—	28	19	3	—	—	—	10
1·32	·43	21	10	—	—	—	—	—	1	—	—	7	36	1	—	—	—	18
3·65	3·88	29	18	—	—	1	—	—	1	—	—	36	—	13	—	—	—	11
3·39	1·36	7	25	—	—	—	—	—	2	—	1	41	—	2	—	—	—	18
2·08	·90	11	24	—	—	1	—	—	5	—	—	25	—	6	—	—	1	30
1·82	·82	5	19	—	—	1	—	—	3	—	—	17	—	9	—	—	—	34
3·89	1·88	18	20	—	—	1	—	—	7	—	—	11	6	5	—	—	—	40
·88	·44	7	8	—	—	—	—	10	20	—	—	1	—	1	—	—	—	58
7·60	1·50	19	16	—	—	—	—	1	14	—	†	—	—	—	—	—	—	—
1·68	3·88	29th June	191	—	—	4	—	12	63	7	1	288	65	43	—	—	2	269

† Wind readings for December incomplete.

Long. 61° 0′ 25″ W. Height of Barometer Cistern above Sea, 744 feet.

5·60	·82	21	25	—	—	—	—	—	—	—	—	62	—	—	—	—	—	—
5·00	·68	22	24	—	—	—	—	—	—	—	—	56	—	—	—	—	—	—
3·39	1·30	23	13	—	—	—	—	—	1	—	2	55	6	1	—	—	—	—
2·94	·98	26	18	—	—	—	—	—	1	—	1	53	—	5	—	—	—	—
4·14	·69	30	21	—	—	—	—	—	—	—	—	58	—	3	—	—	—	—
3·65	1·68	10	24	—	—	2	—	—	—	—	—	54	—	6	—	—	—	—
6·65	2·30	19	28	—	—	3	—	—	1	—	—	50	10	—	—	—	2	—
3·97	1·90	8	29	—	—	6	—	—	7	1	—	45	10	7	—	—	—	—
5·81	·98	1	21	—	—	3	—	1	1	—	—	42	17	1	—	—	—	—
7·52	2·52	12	27	—	—	5	—	—	2	—	—	31	28	3	—	—	—	—
4·38	·90	29	14	—	—	2	—	—	2	—	—	33	10	14	1	—	1	1
5·91	3·97	19	28	—	—	1	—	1	2	—	—	50	9	1	—	—	—	2
04·96	3·97	19th Dec.	272	—	—	22	—	2	17	1	3	589	90	41	1	—	3	3

Annual Abstract of Meteorological Observations taken

Up Park Camp, Jamaica. Lat. 17° 59′ N.

Month.	Mean pressure — Corrected and reduced to 32° Fahrenheit.	Air Temperature.								Tension of Vapour.	Relative Humidity.		
		Mean at 9 a.m.	Mean daily.	Means of		Abs. Max.		Abs. Min.			Per cent.	Min.	
				Max.	Min.	Temp.	Day.	Temp.	Day.		Mean.	Per cent.	Day.
January ...	29·886	75·2	72·3	77·9	67·7	96·6	26	65·2	5	·761	66	44	14
February ...	29·800	80·6	80·3	92·9	68·3	96·6	14	62·2	6	·723	59	36	25
March ...	29·810	78·9	79·6	91·2	68·4	94·4	1	62·4	13	·735	62	43	12
April ...	29·782	80·2	81·2	92·6	69·9	97·4	29	67·6	21	·737	60	44	30
May	29·775	81·3	81·6	91·4	71·8	94·6	21	67·2	1	·795	66	43	1
June ...	29·737	82·1	84·2	95·3	73·2	95·3	25	70·4	1	·810	62	44	25
July ...	29·789	83·6	84·3	95·1	73·6	97·3	9	71·4	7	·752	55	42	3, 14
August ...	29·750	81·5	83·0	92·7	73·3	100·2	10	66·2	11	·758	62	41	10
September ...	29·756	82·9	83·0	93·4	72·7	96·3	16	68·2	4	·814	64	51	16
October ...	29·726	81·3	82·0	92·6	71·3	96·2	13	69·4	27	·825	66	52	10, 17
November ...	29·733	79·7	80·6	92·0	69·3	96·6	11	62·3	29	·765	66	51	15
December ...	29·762	78·4	79·6	92·2	67·4	96·4	12	64·2	5, 11	·721	63	47	10
Year ...	29·775	81·2	81·1	91·6	70·6	100·2	10th Aug.	62·2	6th Feb.	·735	56	36	25th Feb.

Newcastle, Jamaica. Lat. 18° 0′ 6″ N.

January ...	26·376	69·1	71·3	85·1	57·5	86·4	18, 28, 29	54·4	8, 14	·522	65	47	30
February ...	26·348	68·8	70·7	84·4	57·0	86·4	28	52·0	8	·508	63	48	24
March ...	26·314	67·8	69·9	82·0	57·9	86·6	6	53·6	13	·530	70	51	1
April ...	26·305	61·6	72·7	80·7	64·8	85·0	1	55·0	29, 30	·561	73	38	20
May ...	26·469	71·3	72·8	85·5	60·2	84·6	8	56·4	1	·589	74	47	28
June ...	26·327	71·7	73·6	84·6	62·7	88·6	6, 9, 10	60·4	16	·585	72	55	25
July ...	26·349	72·6	74·7	87·5	61·9	95·8	25	60·2	9	·563	64	47	28
August ...	26·340	70·9	71·3	80·5	62·1	89·6	3	60·2	30	·590	75	51	6
September ...	26·351	72·6	72·1	81·9	62·3	87·2	13	61·0	1	·573	64	45	10, 12
October ...	26·320	72·2	70·8	79·8	61·8	85·8	7	58·2	20	·568	64	49	2
November ...	26·311	68·7	66·9	74·2	59·6	82·2	5	50·4	28	·540	70	55	6
December ...	26·309	66·9	66·9	75·9	57·9	80·4	25	50·0	7	·523	71	50	12
Year ...	26·454	69·5	71·1	81·8	60·5	95·8	25th July.	50·0	7th Dec.	·553	69	38	20th April

Bermuda. Lat. 22° 17′ 40″ N.

January ...	29·957	62·4	64·2	69·0	59·5	74·8	3	54·2	10	·511	82	64	28
February ...	30·055	62·3	64·2	70·2	58·2	74·2	17, 22	51·0	21	·501	79	65	7, 27
March ...	30·056	65·2	66·0	69·7	62·3	74·0	1	57·0	28	·550	82	64	8
April ...	29·818	65·1	65·9	70·8	61·1	74·4	16	57·2	8	·524	77	46	26
May	29·910	67·6	68·7	73·9	63·5	76·2	23	59·6	19	·587	79	55	10
June ...	29·920	72·6	73·0	78·2	67·8	84·0	30	61·4	4, 5	·735	83	66	4
July ...	29·990	77·4	78·6	84·7	72·6	90·0	26	67·4	31	·838	79	60	30
August ...	29·966	79·8	81·2	88·1	74·4	90·8	21	70·2	1	·893	76	60	1
September ...	29·969	76·9	78·5	83·3	73·6	90·0	5	68·0	29	·820	79	55	30
October ...	29·866	71·1	72·6	76·9	68·4	81·8	11	61·6	30, 31	·650	76	43	2
November ...	29·894	67·3	68·4	72·9	63·9	77·0	6	57·4	29	·551	75	58	4
December ...	29·914	63·1	64·5	69·1	59·9	76·0	14	49·8	20	·510	81	63	21
Year ...	29·943	69·2	70·5	75·0	65·4	90·8	21st August.	51·0	21st Feb.	·589	79	43	2nd Oct.

at Netley and Stations Abroad in the year 1903.

Long. 76° 56′ W. Height of Barometer Cistern above Sea, 245 feet.

Mean Amount of Cloudiness.	Rainfall.			Weather.								Wind.							
				No. of days of								No. of Observations under each Point per Month.							
	Total.	Max.	Day.	Rain.	Snow.	Hail.	Thunder Storms.	Fog.	Clear Sky.	Overcast.	Gales.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.
5·0	·60	·24	20	6	—	—	—	—	9	—	—	—	27	—	16	—	6	1	12	—
5·0	·02	·02	1	1	—	—	—	—	2	—	—	—	14	—	26	—	6	1	9	—
5·5	1·21	·66	20	4	—	—	—	—	6	—	—	—	6	—	36	1	18	—	1	—
4·0	1·05	·54	8	8	—	—	—	—	6	2	—	—	8	—	25	2	20	—	5	—
6·0	5·13	2·55	30	17	—	—	3	—	—	4	—	—	23	—	24	—	9	1	5	—
5·0	1·00	·23	12	10	—	—	—	—	—	5	—	—	14	—	29	—	7	—	10	—
6·0	·21	·09	9	5	—	—	1	—	—	4	—	—	10	—	29	—	14	—	9	—
6·0	6·45	4·00	10	13	—	—	1	—	—	5	1	—	14	—	31	—	4	—	13	—
6·0	3·04	1·72	3	9	—	—	1	—	1	—	—	—	10	—	38	—	7	—	5	—
6·0	4·68	1·23	19	14	—	—	2	—	—	3	—	—	17	—	26	—	9	—	10	—
5·4	2·09	·75	11	13	—	—	—	—	2	2	—	—	25	—	21	—	7	1	6	—
5·5	·72	·55	13	4	—	—	—	—	1	—	—	1	21	—	22	—	7	1	6	—
5·4	26·30	4·00	10th Aug.	104	—	—	8	—	27	25	1	1	189	—	323	3	114	5	91	—

Long. 76° 0′ 42″ W. Height of Barometer Cistern above Sea, 3,800 feet.

3·0	1·85	·45	6	9	—	—	—	—	—	12	—	17	30	9	—	—	—	1	5	—
3·0	1·36	·65	17	6	—	—	—	—	—	5	—	6	14	16	15	2	—	1	2	—
4·0	2·50	·64	17	14	—	—	—	—	—	12	—	20	21	6	10	1	—	—	4	—
5·0	9·27	4·17	17	15	—	—	—	—	—	17	—	17	11	8	9	8	2	5	—	—
7·0	12·24	3·55	9	17	—	—	2	—	—	31	—	9	11	6	23	9	—	—	4	—
5·0	1·45	·45	29	10	—	—	3	—	—	17	—	—	8	18	23	8	1		2	—
3·0	·59	·20	28	7	—	—	—	—	—	4	—	3	11	36	11	1	—		—	—
5·0	26·72	12·18	10	19	—	—	—	—	—	10	—	1	6	4	36	15	—	—	—	—
4·9	3·91	·75	3	14	—	—	—	—	—	10	—	1	1	3	33	21	—	—	—	—
5·5	7·0	1·80	4	19	—	—	—	—	—	17	—	4	6	5	28	18		—	1	—
6·0	11·57	1·85	14	20	—	—	—	—	—	24	—	9	17	10	14	9		—	1	—
4·5	11·71	4·85	12	16	—	—	2	—	3	11	—	9	17	4	11	2	5	1	5	8
4·6	90·17	12·18	10th Aug.	166	—	—	7	—	3	170	—	96	153	125	213	94	8	8	24	8

Long. 64° 47′ W. Height of Barometer Cistern above Sea, 151 feet.

7·0	4·37	·66	18	21	—	—	—	—	—	5	3	3	6	—	2	2	20	5	19	5
6·0	2·22	·84	22	11	—	—	—	—	—	—	1	2	5	—	3	2	21	3	19	1
6·0	4·25	1·14	26	20	—	—	—	—	—	6	—	3	27	10	8	5	6	—	1	2
5·0	4·19	1·64	27	16	—	—	—	—	—	3	2	8	5	2	2	10	17	8	8	—
7·0	5·28	2·00	17	11	—	—	2	—	—	4	—	7	22	9	5	2	5	—	5	7
7·0	2·53	1·18	23	14	—	—	1	—	—	5	—	2	4	1	12	7	19	8	7	—
5·8	1·73	·80	24	9	—	—	1	—	1	3	—	4	2	3	3	17	20	4	9	—
6·0	3·85	1·56	3	17	—	—	2	—	—	2	—	3	1	—	1	14	27	11	5	—
6·5	8·38	4·19	28	19	—	—	1	—	—	4	1	4	9	14	10	10	8	3	2	—
7·5	9·83	4·33	22	17	—	—	1	—	—	7	2	8	9	8	7	2	11	4	5	8
6·0	7·22	2·20	30	14	—	—	1	—	2	5	—	7	9	1	6	6	11	6	3	11
7·5	9·10	2·44	26	23	—	—	—	—	1	9	2	7	6	—	4	4	16	6	7	12
6·5	62·95	4·33	22nd Oct.	192	—	—	9	—	4	53	11	58	105	48	63	81	181	58	90	46

Annual Abstract of Meteorological Observations taken

Fort Canning, Singapore. Lat. 1° 16′ N.

Month.	Mean Pressure — Corrected and reduced to 32° Fahrenheit.	Air Temperature.								Tension of Vapour.	Relative Humidity.		
		Mean at 9 a.m.	Mean Daily.	Means of		Abs. Max.		Abs. Min.			Per cent.	Min.	
				Max.	Min.	Temp.	Day.	Temp.	Day.		Mean.	Per cent.	Day.
January ...	29·787	72·7	76·6	88·3	64·9	92·0	19	62·4	15	·858	79	64	3, 11, 20
February ...	29·760	77·4	76·1	87·8	64·5	90·0	5	63·0	15	·871	79	65	3
March ...	29·740	77·4	77·1	88·8	65·4	91·0	8	62·0	16	·843	78	64	18
April ...	29·717	80·2	77·6	88·7	66·6	91·2	7	63·0	30	·848	75	64	13, 22, 23
May... ...	29·724	81·3	77·6	89·3	66·0	92·4	23	63·0	1, 17	·907	78	64	10
June ...	29·711	80·4	76·4	88·0	64·9	91·0	5	62·0	10	·878	76	61	3, 9, 21
July ...	29·746	79·4	75·9	86·8	65·0	90·2	28	62·0	7	·815	75	62	25
August ...	29·706	79·3	75·0	85·9	64·2	50·4	5	62·0	14	·864	76	61	1
September...	29·743	79·9	75·7	86·1	65·4	90·4	29	62·2	12	·898	79	65	22, 27
October ...	29·738	78·4	*	89·1	*	92·0	2	*	*	·853	79	56	13, 16
November...	29·741	77·5	*	88·5	*	90·5	26	*	*	·882	83	64	15
December...	29·862	77·6	80·5	90·7	70·2	97·0	9	59·0	9	·767	72	50	13
Year ...	29·748	78·5	—	81·5	—	97·0	9th Dec.	—	—	·857	77	50	13th Dec.

* Minimum Thermometer out of order.

Hong Kong. Lat. 22° 16′ 20″ N.

January ...	30·179	56·6	*	*	55·2	*	*	47·0	7	·380	70	32	7
February ...	30·269	57·7	60·7	66·4	55·1	76·0	25	43·0	3	·379	70	35	7
March ...	30·032	67·0	68·3	73·9	62·8	83·0	11	50·0	2	·588	83	55	1
April ...	30·010	71·9	74·3	79·4	69·2	84·5	11	62·0	6, 30	·646	76	48	7
May ...	29·858	75·0	77·2	81·9	72·6	89·0	31	68·0	3	·771	81	52	9
June ...	29·823	81·3	83·9	89·5	78·3	95·0	12	74·0	28	·891	75	64	4
July ...	29·743	82·6	84·4	89·9	78·9	96·5	31	75·0	19	·904	73	51	31
August ...	29·792	81·2	83·1	88·4	77·9	94·5	1	72·0	25	·872	75	56	6
September..	29·889	78·6	80·9	86·0	75·7	92·0	17	74·0	3, 6	·801	75	52	30
October ...	29·904	75·0	78·7	84·6	72·9	90·5	1	59·0	29	·655	64	49	21, 31
November...	30·102	65·5	69·2	76·5	61·9	87·0	6, 8	46·0	28	·453	57	35	10
December...	30·146	58·4	62·7	70·4	55·0	79·0	15	46·0	4, 22	·354	55	33	5
Year ...	29·979	70·9	*	*	68·0	*	*	43·0	3rd Feb.	·641	71	32	7th Jan.

* Maximum Thermometer out of order.

Wei-Hai-Wei. Lat. 37° 30′ N.

January ...	30·247	28·0	29·0	35·0	24·0	51·0	25	17·0	27	—	—	—	—
February ...	30·352	33·0	34·0	40·0	28·0	51·0	25	20·0	1, 2	—	—	—	—
March ...	30·165	39·0	40·0	47·0	34·0	60·0	2	26·0	6	—	—	—	—
April ...	30·009	51·0	52·0	60·0	44·0	76·0	9	40·0	1, 2	—	—	—	—
May... ...	29·862	61·0	60·0	68·0	53·0	78·0	26	43·0	2, 16	—	—	—	—
June ...	29·676	68·0	69·0	78·0	61·0	89·0	17	55·0	6	—	—	—	—
July ...	29·639	75·0	75·0	80·0	71·0	92·0	11, 12	61·0	6	—	—	—	—
August ...	29·715	75·0	75·0	81·0	70·0	90·0	9	62·0	16	—	—	—	—
September..	29·956	70·0	71·0	77·0	65·0	85·0	1, 2	60·0	8,9,23,24	—	—	—	—
October ...	30·104	56·0	57·0	65·0	49·0	72·0	5	35·0	29	—	—	—	—
November...	30·222	43·0	43·0	50·0	37·0	66·0	4	26·0	22	—	—	—	—
December...	30·192	30·0	34·0	43·0	26·0	54·0	9, 13	17·0	4	—	—	—	—
Year ...	30·011	52·4	53·2	60·0	46·8	92·0	11th & 12th July	17·0	27th Jan. 4th Dec.	—	—	—	—

at Netley and Stations Abroad in the Year 1903.

Long. 103° 53′ E. Height of Barometer Cistern above Sea, 110 feet.

Mean Amount of Cloudiness.	Rainfall.			Weather.								Wind.								
				Number of Days of								No. of Observations under each Point per Month.								
	Total.	Max.	Day.	Rain.	Snow.	Hail.	Thunder Storms.	Fog.	Clear Sky.	Overcast.	Gales.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.
4·0	14·58	2·37	30	19	—	—	7	—	—	10	—	—	—	36	6	18	—	5	1	—
5·0	8·60	2·11	19	14	—	—	6	—	—	5	—	1	—	20	7	17	3	4	—	—
4·0	3·99	·92	20	12	—	—	3	—	—	2	—	—	—	23	9	28	1	1	—	—
4·0	9·53	2·73	30	12	—	—	5	—	—	7	—	—	1	14	15	23	5	1	—	—
4·0	3·90	·84	14	13	—	—	6	—	—	9	—	—	7	16	14	22	1	1	—	—
5·0	6·26	1·42	23	11	—	—	5	—	—	10	—	2	9	20	10	17	2	—	—	—
4·0	5·46	2·06	2	12	—	—	3	—	—	7	—	1	3	22	12	16	7	1	—	—
5·0	11·40	2·43	28	14	—	—	5	—	—	9	—	—	3	21	10	15	11	2	—	—
5·0	3·61	1·34	17	8	—	—	2	—	—	8	—	4	7	19	9	18	3	—	—	—
5·0	2·00	·50	11, 27	11	—	—	2	—	—	7	—	1	2	7	3	12	20	16	1	—
5·5	6·48	1·00	13, 19	15	—	—	5	—	—	10	—	—	7	6	8	13	3	11	12	—
6·5	9·78	2·20	3	11	—	—	—	—	—	5	—	2	20	—	—	—	1	1	38	—
4·7	85·59	2·73	30th April	152	—	—	49	—	—	89	—	11	59	204	103	199	57	43	52	—

Long. 114° 8′ 16″ E. Height of Barometer Cistern above Sea, 18 feet.

4·0	2·14	1·30	11	9	—	—	—	—	7	7	—	3	24	18	—	—	2	4	2	9
5·0	·14	·12	1	2	—	—	—	—	4	4	—	—	7	26	1	—	2	8	1	1
5·0	4·78	2·50	30	11	—	—	1	—	3	13	—	—	9	32	5	3	3	3	—	9
5·0	5·71	4·00	27	8	—	—	1	—	5	8	—	3	10	19	2	7	2	6	5	6
7·0	12·81	3·15	13	15	—	—	3	—	3	16	—	1	29	10	—	4	6	—	—	12
5·0	23·47	10·50	27	14	—	—	5	—	8	7	—	—	6	—	4	9	23	4	1	13
4·0	12·80	3·48	18	20	—	—	4	—	6	2	—	—	5	22	11	—	18	—	—	6
5·0	10·77	2·10	31	17	—	—	4	—	5	9	—	—	6	2	—	2	23	2	2	25
4·8	20·03	3·48	9	14	—	—	—	—	10	7	—	—	22	26	2	—	2	—	—	8
3·9	1·56	·60	27	7	—	—	—	—	7	4	1	3	22	19	—	2	3	—	1	12
2·0	·94	·60	20	3	—	—	—	—	21	2	—	1	16	19	1	—	—	—	—	23
1·6	—	—	—	—	—	—	—	—	20	—	—	—	18	26	1	—	1	—	—	16
4·4	94·65	10·50	27th June	120	—	—	18	—	99	79	1	11	174	219	27	27	85	27	12	149

Long. 122° 10′ 0″ E. Height of Barometer Cistern above Sea, 56 feet.

—	·28	·14	25	2	6	—	—	11	15	16	—	6	—	4	—	—	2	20	24	6
—	·30	·30	24	1	—	—	—	—	22	6	—	2	1	2	2	2	—	14	32	1
—	1·08	·52	30	3	1	—	—	3	15	16	—	2	16	13	2	—	4	8	16	1
—	3·57	1·46	24	4	1	1	1	4	20	10	1	6	4	4	10	4	6	20	6	—
—	1·69	1·04	17	4	—	—	—	2	24	7	3	2	4	13	10	7	9	10	7	—
—	1·27	1·32	10	2	1	1	1	—	25	5	1	2	3	7	5	9	5	18	10	1
—	6·18	1·64	15	11	—	—	3	—	18	13	—	6	—	21	4	6	3	13	8	1
—	14·18	3·20	16	13	—	—	1	2	9	22	1	3	4	7	8	13	7	15	5	1
—	3·49	1·40	2	5	—	—	—	—	16	14	—	11	4	12	—	8	6	8	10	1
—	1·84	·59	25	5	—	—	1	—	22	9	1	12	8	8	1	7	4	12	8	2
—	1·07	·63	3	3	2	—	—	1	17	13	—	3	2	7	—	1	2	18	21	6
—	1·45	·47	14	1	9	—	—	—	13	9	1	3	1	—	2	3	7	11	31	4
—	36·45	3·20	16th Aug.	54	20	2	7	23	216	140	8	58	47	98	44	60	55	167	178	24

Summary of Results of Meteorological

Stations.	Altitude above Sea Level.	Latitude.	Longitude.	Mean Daily Air Temp.	Air Pressure—reduced and corrected to 32° Fahrenheit.	Air Temperature.							Tension of Vapour.	Relati
						Mean, 9 a.m.	Means of.		Abs. Max.		Abs. Min.			Per cent.
							Max.	Min.	Temp.	Date.	Temp.	Date.		Mean.
	ft.	° ′ ″	° ′ ″											
Mediterranean: Gibraltar ...	52	36 6 20 N.	5 20 53 W.	62·7	29·952	61·3	70·4	54·1	90·4	11 Aug.	39·4	1 Dec.	·446	70
Malta ...	112	35 53 49 N.	14 30 54 E.	65·6	29·985	63·2	69·8	61·6	95·2	13 Sept.	41·8	4 Feb.	·466	69
Scutari Cemetery	60	41 0 0 N.	29 3 0 E.	58·5	29·902	55·4	65·9	51·1	93·0	21 July	24·0	18 Jan.	·383	70
Cyprus: Polymedia	460	34 42½ 0 N.	30 1 0 E.	—	—	—	—	—	—	—	—	—	—	—
Mt. Troodos	5,700	34 54 0 N.	32 53 0 E.	—	—	—	—	—	—	—	—	—	—	—
Egypt: Khartoum ...	1,233	15 38 20 N.	32 29 30 E.	†	29·090	71·4	—	68·4	—	—	42·8	23 Jan.	—	—
South Africa: Fort Napier, Natal.	2,220	29 3 0 S.	30 2 0 E.	68·4	‖	63·9	81·1	54·1	154·6	10 March	33·4	12 June	·415	54
Pretoria ...	4,505	25 52 8 S.	28 10 0 E.	—	—	—	—	—	—	—	—	—	—	—
Sierra Leone ...	22	8 29 30 N.	13 9 17 W.	80·9	29·721	79·3	88·3	73·5	98·0	17 March	62·9	9 Aug.	·808	72
West Indies: Barbados ...	30½	13 7 39 N.	59 40 8 W.	80·7	30·023	78·5	87·2	74·2	91·2	{9 Oct. 6 Nov.}	73·2	29 June	·768	67
St. Lucia ...	744	14 0 13 N.	61 0 25 W.	‡	29·305	75·8	‡	‡	‡	‡	‡	‡	·754	74
Jamaica: Up Park Camp.	245	17 59 0 N.	76 56 0 W.	81·1	29·775	81·2	91·6	70·6	100·2	10 Aug.	62·2	6 Feb.	·725	58
Newcastle ...	3,800	18 0 6 N.	76 0 42 W.	71·1	26·454	69·5	81·8	60·5	95·8	25 July	50·0	7 Dec.	·553	69
Bermuda ...	151	32 17 40 N.	64 47 0 W.	70·5	29·943	69·2	75·0	65·4	90·8	21 Aug.	51·0	21 Feb.	·589	79
Singapore: Fort Canning	110	1 16 0 N.	103 53 0 E.	*	29·748	78·5	81·5	*	97·0	9 Dec.	*	*	·857	77
Hong Kong ...	18	22 16 20 N.	114 8 16 E.	†	29·979	70·9	†	†	†	†	43·0	3 Feb.	·641	71
Wei-Hai-Wei ...	56	37 10 0 N.	122 10 0 E.	53·2	30·011	52·4	60·0	46·8	92·0	{11 & 12 July}	17·0	{27 Jan. 4 Dec.}	—	—

† Maximum Thermometers out of order. ‖ Barometer broken. ¶ Wind readings incomplete. ‡ Maximum

at Stations Abroad during 1903.

	Rainfall.			Weather.								Wind.									No. of M in wh Observa were ta
				Number of Days of								Number of Observations under each Point.									
	Total.	Max.	Date.	Rain.	Snow.	Hail.	Thunder Storms.	Fog.	Clear Sky.	Overcast.	Gales.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.	
	26·40	2·25	2 Dec.	79	—	—	9	—	98	93	—	—	7	374	3	2	112	101	131	—	12
	14·44	1·98	23 Dec.	76	—	3	6	—	115	52	71	87	36	95	52	65	40	120	107	46	12
	30·37	2·14	21 Sept.	118	10	19	15	17	90	93	—	221	102	12	7	94	95	17	17	165	12
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4
	—	—	—	4	—	—	—	—	159	—	—	246	176	38	19	142	55	19	18	1	12
	26·41	1·49	27 April	98	—	5	31	—	127	84	6	4	11	10	28	4	26	8	12	591	12
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10
	173·31	9·55	12 Aug.	160	—	—	134	3	7	—	—	38	21	143	21	12	49	243	77	126	12
	51·68	3·88	29 June	191	—	—	4	—	12	63	7	—	—	—	—	¶	—	—	—	—	12
	104·96	3·97	19 Dec.	272	—	—	22	—	2	17	—	—	589	90	41	1	—	—	3	3	12
	26·30	4·00	10 Aug.	104	—	—	8	—	27	25	—	1	189	—	323	—	114	5	91	—	12
	90·17	12·18	10 Aug.	166	—	—	7	—	3	170	—	96	153	125	213	94	8	8	24	8	12
	62·95	4·33	22 Oct.	192	—	—	9	—	4	53	11	58	105	48	63	81	181	58	90	46	12
	85·59	2·73	30 April	138	—	—	49	—	—	89	—	11	59	204	103	199	57	43	52	—	12
	94·65	10·50	27 June	120	—	—	18	—	99	79	—	11	174	219	27	27	85	27	12	140	12
	36·45	3·20	16 Aug.	54	20	2	7	23	216	140	8	58	47	98	44	60	55	167	178	24	12

someters incorrectly levelled, and Maximum Thermometer broken. * **Minimum Thermometers out of order.**

MAURITIUS, 1903.

Month.	Mean Atmospheric Pressure.	Temperature of Air.				Mean Temperature of Evaporation.	Mean Temperature of the Dew Point.	Elastic Force of Vapour.	Degree of Humidity (Saturation 100)	Temperature of Radiation.		Amount of Rain Recorded by Beckley Pluviograph.	Duration of Rainfall.	Amount of Evaporation.	Amount of Ozone.	Mean Amount of Cloud.	Duration of Bright Sunshine.	Percentage of Possible Sunshine.	Mean Direction.	Wind. Mean Velocity (miles per hour).	
		Highest.	Lowest.	Daily Range.	Mean.					Highest in the Sun's Rays.	Lowest on the Grass.									Computed.	Recorded.
	in.	deg.	deg.	deg.	deg.	deg.	deg.	in.	%	deg.	deg.	in.	mins.	in.	0–10	0–10	hours.	%	deg.	miles.	miles.
January	29·698	86·0	73·4	12·6	78·9	75·0	72·3	·795	80·3	147·4	70·5	9·375	—	·220	·4	7·1	6·68		77	4·6	8·4
February	29·720	85·8	·1	12·7	78·0	75·3	72·0	·810	82·1	145·9	69·3	6·190		79	·5	6·6	6·71		84	4·6	7·5
March	29·708	84·7	74·5	10·2	78·8	75·5	73·3	·820	82·5	145·3	71·2	7·605	—	54	3	6·7	7·02		95	8·3	10·2
April	29·801	81·6	70·4	·2	75·5	72·2	69·8	·728	82·5	139·7	66·4	6·510	2,525	164	4·0	·9	7·43	64·0	69	9·2	10·2
May	29·891	80·1	65·7	14·3	72·2	67·5	64·0	·596	75·7	136·3	58·6	1·000	705	·145	3·8	·5	8·59	77·3	67	8·6	9·2
June	29·924	77·5	63·7	13·8	70·0	65·4	61·8	·552	75·0	130·8	57·9	2·095	1,415	·131	4·2	5	7·63	70·0	68	9·4	10·3
July	29·991	76·4	61·5	·9	68·3	62·9	58·7	494	71·0	128·7	55·7	1·595	855	·146	4·9	5·3	7·50	68·0	67	9·9	10·7
August	29·997	75·9	62·3	13·6	68·5	63·0	58·7	·494	70·5	131·5	57·9	1·880	1,330	·155	·5	6·5	7·10	62·4	70	11·71	12·5
September	29·994	76·5	62·0	14·6	68·4	62·7	58·2	485	69·5	135·9	56·9	1·720	1,040	·186	·8	6·4	7·29	61·0	67	11·3	12·7
October	29·939	78·7	63·2	15·5	70·3	64·4	60·9	·516	69·4	140·5	59·2	1·255	1,140	·226	5·1	5·9	8·31	66·0	73	10·7	12·1
November	29·892	82·7	65·1	·6	73·6	66·6	61·5	·546	66·0	144·8	60·7	1·005	435	·300	3·8	4·9	9·65	74·0	84	8·5	10·4
December	29·824	83·8	60·3	14	75·8*	70·2	66·2	·644	71·8	144·2	65·8	2·820	1,100	·238	·7	6·1	8·48	64·0	82	9·5	11·1

* Lowest mean temperature for December since 1875.

EAST AFRICA PROTECTORATE.

Lat. 4° 3′ 21″ S,
Long. 39° 41′ 15″ E.

Meteorological Observations recorded at Mombasa, 1903.

Month.	Barometer and attached Thermometer.		Wet Bulb.	Dry Bulb.	Minimum Thermometer.	Maximum Thermometer.	Rain-fall.
January	30·066	81·6	78·2	81·40	76·70	86·5	1·16
February	30·087	82·3	78·2	82·08	76·70	87·4	·89
March	29·909	84·5	80·3	84·20	78·40	89·6	2·74
April	30·036	83·3	79·2	83·08	78·00	87·8	3·85
May	30·090	80·4	76·3	79·90	75·80	83·8	6·84
June	30·140	79·4	75·4	79·08	75·40	83·8	1·92
July	30·174	76·7	73·3	76·30	73·50	82·1	3·19
August	30·170	77·1	73·4	76·70	73·20	82·2	5·16
September	30·173	78·1	74·6	77·70	73·04	85·4	2·35
October	30·128	81·8	76·7	81·30	75·10	85·4	·81
November	30·093	82·5	77·7	82·06	75·50	86 1	3·45
December	30·040	82·7	77·5	82·20	75·90	86·4	1·48

WEST AFRICA.

Meteorological Observations taken at Accra, 1903.

Month.	At 9 a.m.		Rain.	At 5 p m.			
	Dry Bulb.	Wet Bulb.		Dry Bulb.	Wet Bulb.	Maximum Thermometer.	Minimum Thermometer.
			ins.				
January	77·74	73·32	3·50	79·51	74·48	81·70	63·61
February	79·39	75·07	3·80	82·00	77·39	87·89	65·28
March	83·19	78·20	·17	83·38	78·58	88·83	67·48
April	84·00	77·83	1·23	83·56	78·13	87·90	67·30
May	82·93	77·25	1·00	81·32	77·16	85·00	65·80
June	79·06	75·26	3·17	77·90	74·26	82·73	98 16
July	76·70	74·16	2·01	75·29	73·06	79·67	69·16
August	75·70	72·83	·84	74·70	71·93	79·80	70·54
September	78·23	73·76	·40	76·63	73·06	79·53	71·30
October	81·61	75·80	2·23	80·22	75·09	83·80	73·18
November	82·56	73·93	2·05	80·80	76·76	86·40	73·10
December	81·12	76·80	—	81·22	76·93	86·41	74·54

Meteorological Observations taken at Cape Coast, 1903.

Month.	At 9 a.m.		Rain.	At 5 p.m.			
	Dry Bulb.	Wet Bulb.		Dry Bulb.	Wet Bulb.	Maximum Thermometer.	Minimum Thermometer.
			ins.				
January	81·12	78·70	2·50	82·29	79·83	86·03	74·45
February	80·42	75·89	·39	81·17	76·96	85·35	72·89
March	85·51	80·19	3·22	85·74	80·38	89·74	77·61
April	83·53	79·33	3·65	84·90	80·03	88·43	76·16
May	80·06	76·32	·92	80·90	76·58	85·54	73·90
June...	79·30	76·43	6·58	77·20	75·10	82·96	72·22
July	75·90	74·06	1·33	76·09	74·22	78·70	70·56
August	75·67	73·74	·34	77·00	74·41	79·16	70·16
September	76·63	74·50	1·05	79·00	76·23	80·76	70·35
October	80·19	76·58	7·67	80·29	77·19	83·35	71·19
November	84·60	79·30	1·60	81·53	79·36	86·10	71·53
December	84·67	78·67	·75	80·61	78·70	85·93	—

Meteorological Observations taken at Kumasi, 1903.

Month.	At 9 a.m.		Rain.	At 5 p.m.			
	Dry Bulb.	Wet Bulb.		Dry Bulb.	Wet Bulb.	Maximum Thermometer.	Minimum Thermometer.
			ins.				
January	—	—	—	—	—	—	—
February	77·53	71·96	—	84·00	76·07	88·64	67·96
March	81·09	78·38	·70	87·87	82·61	91·48	72·96
April	78·83	75·86	5·13	84·76	78·93	89·13	71·06
May	78·70	69·96	3·66	83·51	79·16	84·61	67·93
June...	75·70	74·26	4·63	80·30	78·43	84·20	71·10
July	73·58	71·87	5·4	77·90	75·06	81·03	68·51
August	73·48	71·12	3·99	77·51	74·29	80·80	68·25
September	74·80	71·53	5·24	78·43	74·50	81·83	67·10
October	75·61	72·58	7·59	80·51	75·51	85·90	68·51
November	77·06	73·70	3·66	81·30	76·60	86·43	69·30
December	76·58	72·92	·37	82·09	76·29	83·35	68·03

METEOROLOGICAL REPORTS OF UPPER SHERIKH.

For the period ending Wednesday, 29th June, 1904.

Date.	Maximum in shade.	Minimum in shade.	Rainfall.		Direction of wind.	Remarks.
			Inches.	Cents.		
	deg.	deg.				
23.6.04 ...	86	68	...	...	South-West	Bright day; high winds at night.
24.6.04 ...	91	68	...	...	,,	,, ,,
25.6.04 ...	91	68	...	...	,,	,, ,,
26.6.04 ...	85	68	...	...	,,	,, ,,
27.6.04 ...	91	68	...	...	,,	,, ,,
28.6.04 ...	86	68	...	...	,,	,, ,,
29.6.04 ...	90	68	...	...	,,	,, ,,

For the period ending Wednesday, 6th July, 1904.

	deg.	deg.				
30.6.04 ...	88	68	...	...	South-West	Bright day; high winds at night.
1.7.04 ...	91	68	...	...	,,	Cloudy morning, bright day; high winds at night.
2.7.04 ...	87	67	...	...	,,	Cloudy morning, bright day; high winds at night.
3.7.04 ...	87	67	...	...	,,	Cloudy morning, bright day; high winds at night.
4.7.04 ...	87	67	...	...	,,	Bright day; high winds at night.
5.7.04 ...	85	67	...	...	,,	,, ,,
6.7.04 ...	85	67	...	...	,,	,, ,,

For the period ending Wednesday, 13th July, 1904.

	deg.	deg.				
7.7.04 ...	87	67	...	...	South-West	Bright day; high winds at night.
8.7.04 ..	90	68	...	...	,,	,,
9.7.04 ...	85	67	...	..	,,	Cloudy day; high winds at night.
10.7.04 ...	85	67	...	...	,,	,,
11.7.04 ...	85	67	...	...	,,	Bright day; high winds at night.
12.7.04 ...	89	66	...	9	,,	Cloudy day; slight drizzle at 4 p.m. High winds at night.
13.7.04 ...	92	67	...	...	,,	Bright day; high winds at night.

For the period ending Wednesday, 20th July, 1904.

	deg.	deg.				
14.7.04 ...	91	67	...	...	South-West	Bright day; high winds at night.
15.7.04 ...	92	66	...	...	,,	,, ,,
16.7.04 ...	88	66	...	...	,,	,, ,,
17.7.04 ...	90	68	...	...	,,	,, ,,
18.7.04 ...	86	66	...	...	,,	,, ,,
19.7.04 ...	85	66	...	...	,,	,, ,,
20.7.04 ...	85	66	...	...	,,	Cloudy day; heavy shower 6.30 p.m. High winds at night.

Meteorological Reports of Upper Sheikh.

For the period ending Wednesday, 27th July, 1904.

Date.	Maximum in shade.	Minimum in shade.	Rainfall.		Direction of wind.	Remarks.
			Inches.	Cents.		
	deg.	deg.				
21.7.04 ...	88	66	...	...	South-West	Bright day; high winds at night.
22.7.04 ...	88	67	...	...	,,	,, ,,
23.7.04 ...	85	67	...	...	,,	,, ,,
24.7.04 ...	88	67	...	...	,,	,, ,,
25.7.04 ...	84	67	...	...	,,	,, ,,
26.7.04 ...	82	66	...	...	,,	,, ,,
27.7.04 ...	82	66	...	...	,,	Cloudy day; high winds at night.

For the period ending Wednesday, 3rd August, 1904.

	deg.	deg.				
28.7.04 ...	85	66	...	...	South-West	Bright day; high winds at night.
29.7.04 ...	92	67	...	...	,,	,, ,,
30.7.04 ...	85	67	...	...	,,	,, ,,
31.7.04 ...	85	67	...	...	,,	,, ,,
1.8.04 ...	85	66	...	...	,,	Cloudy morning; high winds at night.
2.8.04 ...	79	66	...	...		Cloudy morning; high winds at night.
3.8.04 ..	88	66	...	...	,,	Cloudy evening; slight drizzle; high winds at night.

For the period ending Wednesday, 10th August, 1904.

	deg.	deg.				
4.8.04 ..	88	67	1	55	South West.	Heavy shower of rain 5 p.m ; high winds at night.
5.8.04 ...	87	64	...	...	,,	Bright day; high winds at night.
6.8.04 ...	92	65	...	...	,,	,, ,,
7.8.04 ...	88	66	...	...	,,	,, ,,
8.8 04 ...	85	67	...	...	,,	,, ,,
9.8.04 ...	86	67	...	...	,,	,, ,,
10.8.04 ...	85	67	...	...	,,	,, ,,

For the period ending Wednesday, 17th August, 1904.

	deg.	deg.				
11.8.04 ...	85	67	...	...	South-West	Bright day; high winds at night.
12.8.04 ...	88	67	...	...	,,	,, ,,
13.8.04 ...	90	67	...	10	,,	Cloudy evening; slight drizzle at night.
14.8.04 ...	92	66	...	...	,,	Bright day; high winds at night.
15.8 04 ...	95	68	...	...	,,	,, ,,
16.8.04 ...	91	68	...	...	,,	,, ,,
17.8.04 ...	91	68	...	...	,,	,, ,,

METEOROLOGICAL REPORTS OF UPPER SHEIKH.

For the period ending Wednesday, 24th August, 1904.

Date.	Maximum in shade.	Minimum in shade.	Rainfall.		Direction of wind.	Remarks.
			Inches.	Cents.		
	deg.	deg.				
18.8.04 ...	91	68	...	...	South-West	Bright day; high winds at night.
19.8.04 ...	91	68	...	...	,,	,, ,,
20.8.04 ...	86	67	...	...	,,	,, ,,
21.8.04 ...	85	67	...	...	,,	,, ,,
22.8.04 ...	85	68	...	...	,,	,, ,,
23.8.04 ...	85	68	...	...	,,	,, ,,
24.8.04 ...	86	68	...	...	,,	,, ,,

For the period ending Wednesday, 31st August, 1904.

	deg.	deg.				
25.8.04 ...	91	68	...	...	South-West	Bright day; high winds at night.
26.8.04 ...	95	68	...	...	,,	,, ,,
27.8.04 ...	92	68	...	...	,,	,, ,,
28.8.04 ...	85	68	...	17	,,	Cloudy evening; slight drizzle at 6 p.m.
29.8.04 ...	86	67	...	...	,,	Bright day; high winds at night.
30.8.04 ...	85	68	...	...	,,	,, ,,
31.8.04 ...	85	68	...	...	,,	,, ,,

For the month of September, 1904.

	deg.	deg.				
1 ...	93	68	...	...	South-West	Bright day; high winds at night.
2 ...	93	68	...	...	,,	,, ,,
3 ...	93	68	...	...	,,	,, ,,
4 ...	95	70	...	...	,,	Cloudy afternoon; high winds at night.
5 ...	91	70	...	5	,,	Cloudy evening; slight drizzle.
6 ...	91	70	...	...	,,	Cloudy evening.
7 ...	91	70	...	..	,,	Cloudy evening; bright morning.
8 ...	92	68	...	...	,,	Bright day.
9 ...	91	68	...	...	,,	Bright morning; cloudy evening.
10 ...	92	64	..	...	,,	Cloudy evening; high winds at night.
11 ...	95	64	...	...	,,	Bright day.
12 ...	88	64	...	8	,,	Cloudy day; slight shower at 3 p.m.
13 ...	85	64	...	...	,,	Cloudy; high winds at night.
14 ...	93	64	...	8	,,	Cloudy afternoon; high winds at night; slight shower.
15 ...	91	64	...	...	,,	Cloudy evening; high winds at night.
16 ...	88	65	...	2	,,	Cloudy afternoon; high winds at night; slight drizzle.
17 ...	88	64	...	...	,,	Cloudy evening; high winds at night.
18 ...	88	64	...	...	,,	Bright day; high winds at night.
19 ...	92	65	...	...	,,	,, ,,
20 ...	88	64	...	...	,,	Cloudy evening; high winds at night.
21 ...	93	64	...	...	,,	Bright day; high winds at night.
22 ...	92	64	...	...	,,	,, ,,
23 ...	92	64	...	...	North-East	,, ,,
24 ...	92	64	...	...	,,	,, ,,
25 ...	95	66	...	...	,,	Cloudy evening.
26 ...	92	63	...	...	,,	Bright day.
27 ...	88	62	...	4	,,	Cloudy morning; slight shower at 2 p.m.
28 ...	78	60	...	58	,,	Slight shower 6 a.m.; rain between 1 and 4 moderate.
29 ...	78	58	...	...	,,	Bright day.
30 ...	85	59	...	5	,,	Bright morning; slight shower 3 p.m.

Meteorological Report of Upper Sheikh.

For the month of October, 1904.

Date.	Maximum in shade.	Minimum in shade.	Rainfall.		Direction of wind.	Remarks.
			Inches.	Cents.		
	deg.	deg.				
1 ...	80	55	...	4	North-East	Slight drizzle in afternoon.
2 ...	85	54	...	...	,,	Cloudy day.
3 ...	80	53	...	...	,,	Bright day.
4 ...	80	59	...	9	,,	Cloudy afternoon; slight rain.
5 ...	85	59	...	...	,,	Bright day.
6 ...	84	60	...	34	,,	Cloudy afternoon; slight shower at 2 p.m.
7 ...	81	54	...	8	,,	Cloudy day; slight drizzle at 2 p.m.
8 ...	79	53	...	41	,,	Heavy shower in afternoon.
9 ...	81	56	...	...	,,	Bright day.
10 ...	85	54	...	...	,,	,,
11 ...	86	54	...	...	,,	,,
12 ...	87	54	...	...	,,	,,
13 ...	87	52	...	...	,,	,,
14 ...	90	54	...	...	,,	,,
15 ...	90	60	...	...	,,	,,
16 ...	88	56	...	...	,,	,,
17 ...	86	55	...	...	,,	,,
18 ...	86	56	...	...	,,	,,
19 ...	83	52	...	...	,,	,,
20 ...	84	52	...	...	,,	,,
21 ...	81	52	...	...	,,	,,
22 ...	84	51	...	...	,,	,,
23 ...	86	56	...	...	,,	,,
24 ..	90	59	...	...	,,	,,
25 ...	88	58	...	...	,,	,,
26 ...	86	62	...	...	,,	Cloudy day.
27 ...	85	55	...	...	,,	Bright day.
28 ...	80	53	...	...	,,	,,
29 ...	83	55	...	...	,,	,,
30 ...	85	54	...	...	,,	,,
31 ...	86	55	...	...	,,	,,

THE PARKES MEMORIAL PRIZE.

Surgeon-General A. KEOGH, M.D., C.B., Director-General, *President of Committee.*

Colonel J. LANE NOTTER, M.A., M.D., *Treasurer.*

Captain C. E. P. FOWLER, F.R.C.S., *Secretary.*

Prize Essay Medallists.

1883. Surgeon R. J. POLDEN, Indian Medical Service.
1886. Surgeon A. DUNCAN, M.D., Indian Medical Service.
1889. Surgeon R. H. FIRTH, F.R.C.S. Eng., Medical Staff.
1892. Surgeon-Captain R. H. FIRTH, F.R.C.S. Eng. Army Medical Staff.
1895. Surgeon-Major R. ROSS, Indian Medical Service.
1898. Surgeon-Captain F. SMITH, Army Medical Staff.
1901. Captain H. A. L. HOWELL, Royal Army Medical Corps.
1904. Major R. CALDWELL, Royal Army Medical Corps.

The following is the subject for the next prize :—

"ON THE SANITARY REQUIREMENTS OF NAVAL AND MILITARY UNITS IN PEACE AND WAR; WITH SUGGESTIONS FOR COMPLETE SCHEMES OF SANITARY ORGANISATION SUITABLE FOR BOTH THE NAVY AND ARMY."

The Prize is Seventy-five Guineas in Money and a Bronze Medal, and is Awarded Triennially.

The Competition is open to all Medical Officers of the Army, Navy, and Indian Services of Executive Rank on full pay, with the exception of the Professors and Assistant Professors of the Royal Army Medical College during their term of office. Essays to be sent to the Secretary of the "Parkes Memorial Fund," Royal Army Medical College, Examination Hall, Victoria Embankment, London, on or before the 31st day of December, 1906. Each essay to have a motto, and to be accompanied with a sealed envelope bearing the same motto and containing the name of the competitor.

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